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EDITORIALS

BUY EARLY—There are evidences all about us that the canning industry will be plagued with shortages this coming season that might very well rival the hectic days of World War II. For some months now, this column has been harping on the subject of materials' shortages for canning machinery. Judging from reports, not too many canners are particularly bothered on this account. It's of course, possible that there will be no regrets on this score, but it seems pretty safe to say that there'll be many a superintendent tearing his hair when he can't get that needed repair part or replacement when the breakdown occurs in the middle of the pack.

Now, as the season approaches, we are being told, of other shortages that canners may expect. The University of Maryland, for instance, this week, advises there's a tight supply of some types of insecticides, particularly those containing sulfur, carbamates, and DDT. Extension entomologists at the University are advising farmers and canners to buy at least part of their season's needs as early as possible. They point out that priorities have been given on some insecticidal materials that are scarce, to enable manufacturers to meet grower's needs. Production of insecticides is expected to meet the demand, they say, but it may be necessary to use substitutes. On some crops it will be difficult for canners to anticipate the amount of insecticides that will be needed. Even so, they might better order in a moderate supply. On crops such as tomatoes, where a definite spraying or dusting schedule is followed, regardless of the incidence of disease or pests, canners might very well order in their entire supply.

Closely allied with this shortage of insecticides, and for much the same reason, sulfur, is the anticipated shortage in fertilizers, especially superphosphate, our largest single fertilizing material. Sulfuric acid makers, who supply superphosphate manufacturers with acid, will receive 10 percent less sulfur in 1952 than they were able to buy in 1950, according to the National Fertilizer Association. While it may be true that not too much superphosphate itself is used directly in the production of canning crops, it's reasonable to believe that the shortage in this particular type of fertilizer (13 percent below 1951), will cause a drain on the supplies of other types. Also canners owning or leasing land, will use a large amount of superphosphate on the rotation acreage not being used for canning crops this season. So here again it should be a good idea to get those orders in at the earliest possible date.

LABOR—Speaking of shortages, don't overlook the expected critical shortage of agricultural labor this coming year. This being the fence mending season, it might pay handsome dividends to mend your public relation fences, particularly in those areas where most of your regular seasonal help is located. Crop men out scouting up acreage, may be able to help a good bit in this respect, for usually a good proportion of the seasonal help comes from the households of farmer-growers.

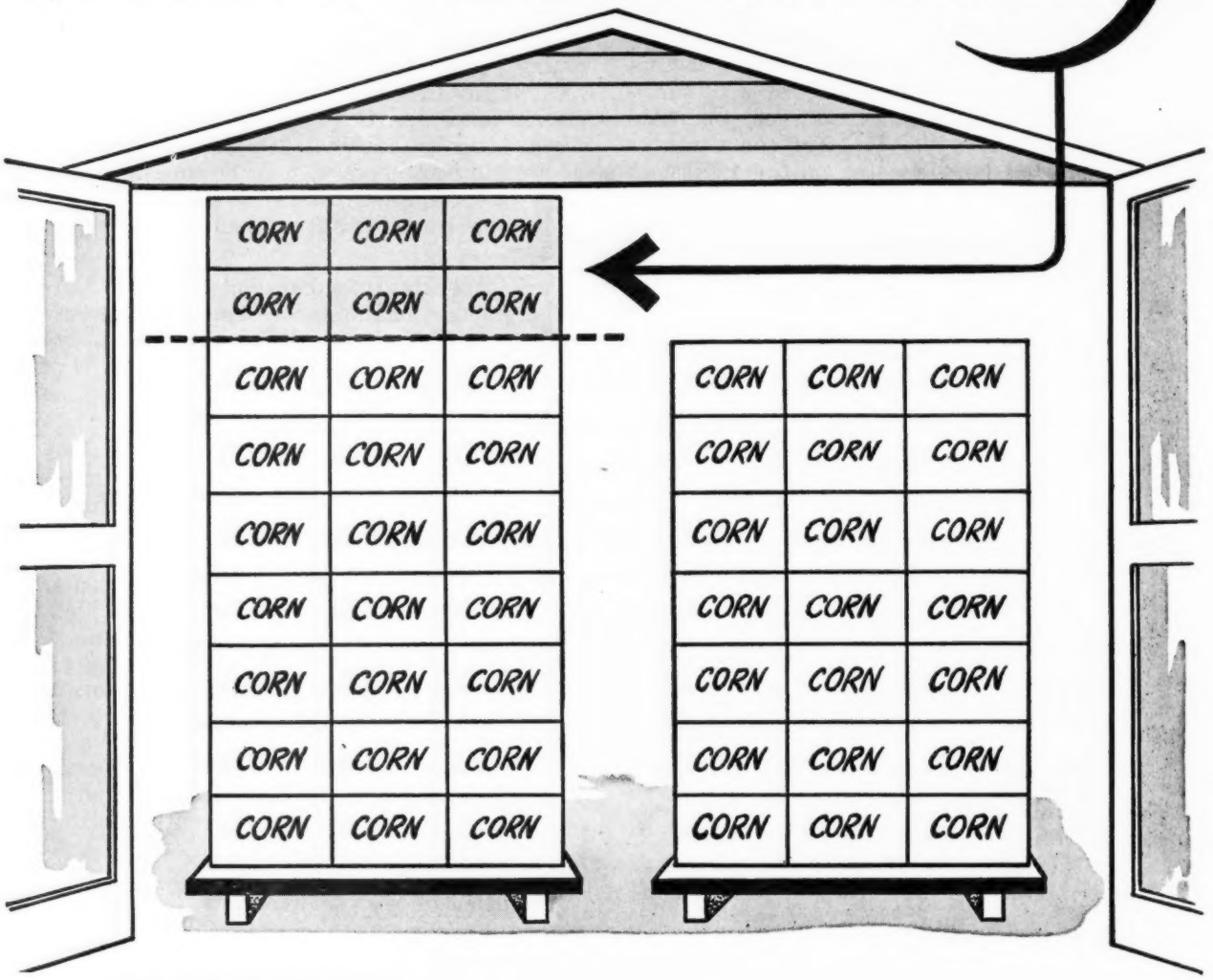
Again, speaking of labor, judging from the report of the Labor Commissioner, appearing elsewhere in this issue, canners have some brushing up to do on the Wage and Hour Law. Running afoul of this one is a costly proposition, and from all appearances the Labor Department is hard on the job.

NEW HOPE—"Some new light has been shed on the ever increasing problem of resistance of insect pests to chemicals used to control them", says a Connecticut Agricultural Experiment Station release just received. The release goes on to say that the experiments of Dr. Raimon L. Beard, and Neely Turner have added considerably to the knowledge about the causes of resistance, and offer a possible solution to the problem. These scientists have found out that insects are not fixed in their resistance to insecticides, that is, an individual insect may be highly resistant to an insecticide one day and a few days later may be easily killed by it. Thus by exposing them constantly to a material for a long time all but the consistently resistant ones could be eliminated. With this information it would be simple to avoid build up of resistance by avoiding the use of chemicals that remain toxic for a long time after application, says the report. The validity of this theory, it continues, is borne out by the fact that there was no resistance problem when temporary insecticides like rotenone and nicotine were used.

The scientists found also, that a combination of chemicals rather than a single insecticide diminished the chances of resistance build-up, since an insect resistant to one chemical is not necessarily resistant to another. Tests have shown that two weak insecticides give as high a kill of insects as one strong one.

It all sounds a little complicated, but complicated or not, these gentlemen may be sure they have the good wishes of canners and growers alike, who have been just a bit more than perplexed when, after following the rules religiously, at least as best they knew how, the bugs continued chewing merrily along. Many good sensible people have come to the conclusion that there's something radically wrong with our modern day approach to the insect problem. Let's hope this is the answer.

IT'S THE *Extra* CASES IN YOUR WAREHOUSE THAT COUNT!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Wage-Hour Law Compliance

Recently released statistics on the first full year of operations under the amended Federal Wage and Hour Law show that there is room for improvement within the Canning Industry in the matter of complying with the amended Fair Labor Standard Act of January 25, 1950.

According to the 1951 annual report of the U. S. Labor Department's Wage and Hour and Public Contracts Divisions, 51 percent of the establishments investigated in this industry during the past fiscal year were found to have violated the Act's minimum wage, overtime pay or child-labor provisions.

"The 1951 record makes it clear that greater efforts on the part of some members of the canning industry would pay off in reduced liabilities for back wages owed employees," points out Wm. R. McComb, the Divisions' Administrator. His report shows that a total of $109,725 in back wages was paid to 3,287 employees, as a result of the Divisions' activities.

"Although most employers know that the amendments raised the minimum wage to 75 cents an hour from 40 cents, the Divisions found that a sizable minority of establishments — 18 percent of those investigated—had failed to observe this requirement when paying some of their employees," states McComb.

"Even more extensive were overtime pay violations, found in 34 percent of the investigated establishments. Employers should remember that the amended Act continues to require payment of at least time and one-half the employee's regular rate of pay for all hours worked in excess of 40 in the workweek, except where the Act specifically provides otherwise. What the amendments did was to define the regular rate to include all remuneration for employment except certain specified payments."

Failure to comply with the Act's child-labor provisions was disclosed in 12 percent of the investigated establishments, McComb noted. The child-labor requirements set a minimum age of 16 for most jobs with 18 as the minimum for occupations designated hazardous by the Secretary of Labor. Employment of boys and girls of 14 and 15 years of age is permitted in a few types of jobs—such as office and sales w ork — under strict restrictions on hours and working conditions.

The Administrator wants members of the industry to know that the violations found last year were not representative of the compliance record of all employers whose employees come within the provisions of the Act. The Divisions' policy is to make investigations where there is reason to believe that violations will probably be found. Moreover, experience demonstrates that the great majority of employers intend to comply with the Act; in most cases, failures are due to misunderstandings about the statutory provisions.

To assist the canning industry in attaining full compliance, McComb invites any employer who has questions about the Federal Wage and Hour Law to inquire of the nearest regional office of the Divisions. These offices are located in the following cities: Boston, New York, Philadelphia, Birmingham, Cleveland, Chicago, Kansas City, Dallas, San Francisco, and Nashville.

RAW MATERIAL ADJUSTMENT CLARIFIED, OTHER CHANGES IN PRICING ORDER

OPS on February 26 issued Amendment 8 to CPR 55, the Canned Vegetable Pricing Order, and Amendment 7 to CPR 56, the Canned Fruit Pricing Order. Both amendments specifically provide that the raw material increase or decrease may be figured on a graded basis only if the processor purchased on the same graded basis in each of the years 1948, 1950 and 1951 (Fruits 1948 and 1951 only). If not, then he uses the weighted average price paid in each year regardless of grade. Processors who had changed their method of processing during those years, OPS said, had indicated uncertainty as to whether they determine their ceilings under Section 2 of the regulation, or use other provisions of the regulations.

The amendments also broadened the pricing provisions of Section 4 to each of the regulations, and make other miscellaneous changes. Section 4 defines how to arrive at a ceiling price for an item not sold during the base period, by comparison with other items of the product sold during the period.

Section 4 is amended by reversing the sequence of paragraphs (b) and (c) in order that processors may determine ceiling prices for items not sold during the base period by using a markup over direct costs of a comparable item before being required to use the change of container size provisions of the original paragraph (b). However, smaller processors who do not have adequate records to make direct cost comparisons will still be able to use the change of container size provision. Paragraph (a) and the newly designated paragraph (b) are also amended to provide that the "comparison item" shall be one for which the processor is able to figure a ceiling price even though he is no longer selling the item. This change will provide for consistent treatment in paragraphs (a), (b) and (c). Section 4 is further changed to provide that container sizes within the range of No. 3 cylinder and larger sizes may be priced by comparison with each other but not by comparison with can sizes smaller than the No. 3 cylinder; that items which differ in grade or grade and container size be priced by reference on the opening price list to a comparison item nearest in price on such price list; the word density has been added to paragraph (a) (3) in order that items such as tomato puree may be priced by reference to a comparison item of a different density; and revised paragraph (b) has been amended to provide that the comparison item shall be an item of the same grade of the product whose direct cost is the closest to that of the item being priced or if there is no item of the same grade, there the comparison item is the item of any other grade of the product whose direct cost is nearest to that of the item being priced.

It is believed that these changes will enable processors to make more frequent use of section 4, rather than sections 6 or 7, and will more nearly conform the provisions of section 4 to customary practices in the industry. Processors may avail themselves of the pricing provisions of section 4 as amended by this amendment but are not required to recalculate ceilings for items which have been determined prior to the effective date of this Amendment 8.

Section 7, dealing with individual authorization, is amended by making reference to the official form which may be used in applying for a price; by changing paragraph (b) to specify that supplemental information must be submitted to OPS within 20 days from date of the letter or telegram requesting additional information, and by making the 20-day period, after which a proposed price will be deemed authorized, begin to run from the date the application or all additional information is received by OPS by registered mail, return receipt requested, rather than 20 days from date of mailing as presently provided. These changes will permit OPS to have the same period of time in which to act on each individual request for a price regardless of the distance from Washington of the processor.

The reporting provisions of section 19 have been modified in order to require a processor who is pricing under section 6 to file with his reporting form a statement showing why he cannot price under section 2, 3, or 4. It is also made clear that ceiling prices determined under any supplementary regulation to CPR 55 must be reported.

(Please turn the page.)

WASHINGTON

(Continued from Page 9)

LABELING EXEMPTIONS FOR FOODS REPACKAGED IN RETAIL FOOD ESTABLISHMENTS

Part 1 REGULATIONS FOR THE ENFORCEMENT OF THE FEDERAL FOOD, DRUG, AND COSMETIC ACT is amended in the following respects:

a. Section 1.8 *Food; labeling; required statements; when exempt* is amended by adding the following new paragraph:

(n) A food shall be exempt while held for sale from the requirements of clause (2) of section 403 (e) of the act (requiring a statement on the label of the quantity of contents) if said food, having been received in bulk containers at a retail establishment, is accurately weighed, measured, or counted either within the view of the purchaser or in compliance with the purchaser's order.

b. Section 1.10 *Food; labeling; designation of ingredients* is amended by adding the following new paragraph:

(f) A food shall be exempt while held for sale from the requirements of clause (2) a counter card, sign, or other approing a declaration on the label of the common or usual name of each ingredient when the food is fabricated from two or more ingredients) if said food, having been received in bulk containers at a retail establishment, is displayed to the purchaser with either (1) the labeling of the bulk container plainly in view or (2) of section 403 (i) of the act requirpriate device bearing prominently and conspicuously the information required to be stated on the label pursuant to clause (2) of section 403 (i).

BACKGROUND INFORMATION USE OF CHEMICALS IN FOOD

A comprehensive file of Background Information on "The Use of Chemicals in Foods" has been prepared by the Manufacturing Chemists' Association.

The forty-page memorandum discusses the historical evolution of the use of chemicals in foods, the number of new products that are coming into use and how they are tested for performance and safety. The report also outlines the benefits to agricultural productions of chemicals used in food growing. Date and statistics relative to the freedom from toxicity and improvement in the nutritive values of foods through chemical enrichment are followed by a discussion of proposals for changes in the present Food and Drug Administration Law.

A point-by-point rebuttal of scare stories that have intimated that there is peril in the consumer's market basket concludes the Memorandum. Copies are available for food technologists and related specialists on request to Hill & Knowlton, Room 5404, 350 5th Avenue, New York 1, New York.

PRICE SUPPORTS FOR 1952-CROP DRY EDIBLE BEANS

Support for 1952-crop dry edible beans at prices designed to effect needed adjustments in production of the various classes of beans was announced by the U. S. Department of Agriculture. The support prices will provide a national average support level of approximately 85 percent of the January 15, 1952 parity price for dry edible beans.

Dollars-and-cents support prices for all classes of beans are higher this year than last, but the increases are greatest for the classes in greatest demand. The Department's production program for 1952 calls for an increase in this year's acreage of Great Northern, pea, and large lima beans, and for production of all other classes except baby limas at about their 1951 level of output. A substantial reduction is sought in 1952 production of baby limas because of the existence of a substantial surplus of this class of beans.

The national production goal for all classes of beans in 1952 is for 16,250,000 bags of 100 lbs. (cleaned basis) on 1,620,000 planted acres. This compares with production in 1951 of 16,000,000 bags on 1,523,000 acres. Officials pointed out that the larger acreage called for in this year's goal reflects both a higher production goal and the possibility of lower yields. Per acre yields in 1951 were a near-record high.

The national acreage and production goals have been broken down into State goals for all beans without reference to classes except for baby limas in California. The goal for baby limas in California calls for 40,000 acres as compared with about 52,000 planted in 1951. Also, States which traditionally plant Great Northern beans are urged to plant a larger proportion of their acreage to Great Northern in preference to pinto beans.

TIN CANS AND THE SCRAP DRIVE

The government is not sponsoring a nation-wide tin can salvage program because used cans have to be detinned before they can be used as scrap by most steel mills. There are only six detinning plants in the whole country and, while most of them could use more cans than they are getting from collectors close enough to ship to them, the cost of shipping beyond about 50 miles makes it unprofitable. During the last War it was a much more profitable project because cans were hot dipped and contained about 5 percent tin, whereas now using the electrolytic process the tin content is only about one-half of 1 percent. Some scrap dealers are bailing tin cans and shipping them to the steel mills, but most mills themselves do not want "green" cans because the tin on them is poisonous to the melt. An order (M-98) was issued February 14 directing the flow of tin cans in California and Arizona to shredding plants in Los Angeles and San Diego where they are prepared for use in producing copper through a chemical precipitation process from waters containing a copper sulfate solution in or about copper mines.

M-98 is effective only in the following counties of the two states: California — Kern, Los Angeles, Orange, San Bernardino, Santa Barbara, Riverside, Ventura, San Diego and Imperial. Arizona—Maricopa and Pima. Deliveries of cans must be made within the foregoing counties only, or to a copper producing plant.

NPA explained that the order was necessary to assure an adequate supply of shredded cans to copper producers who precipitate copper from mine run-off water, in and about copper mines, that contains copper sulphate.

Production of copper by this method has been in effect about 35 years, NPA said. City and county officials in 11 counties have cooperated in collecting tin cans and selling them to shredding plants.

In recent months part of this regular supply of scrap cans was diverted to steel mills. Thus copper producers were faced with a shortage of about 3,000 tons of scrap a month. Since one ton of copper can be obtained by precipitating one-and-a-quarter tons of shredded cans, this would amount to a loss in copper production of about 2400 tons a month.

FEDERAL SEED LABORATORY

Establishment of a Federal seed laboratory at the New Jersey College of Agriculture at New Brunswick, in connection with administration of the Federal Seed Act in 13 Northeastern States (Me., N.H., Vt., Conn., Mass., R.I., N.Y., N.J., Penna., Md., Del., Va., W.Va. and District of Columbia) was announced today by the USDA. The principal activity at New Brunswick will be the testing of seed offered for importation through Atlantic ports south to Norfolk, Va. Most of these offerings come through the port of New York. Last year, more than 50 million pounds were offered for entry through the Atlantic ports to be covered by the New Brunswick laboratory.

N.F.B.A. MEMBERSHIP HITS 1600

The membership of the National Food Brokers Association has passed the 1600 mark, it is reported by Watson Rogers, NFBA President. The firm which became the 1600th member is the Wilkinson-Bethke Co., of Milwaukee, Wisconsin. The membership figure represents a record high for the forty-eight year old trade association. Its member firms provide sales coverage in every market area in the United States. It also has members in Canada, Hawaii, Alaska, Cuba and Mexico.

FOR COMPLETE INFORMATION
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NEWS AND PERSONALS

FRANCIS HEADS CORN PRODUCTS SALES

W. H. Gamble, President of Corn Products Sales Company, has announced that Harold Francis has been elected a Vice-President and has also been appointed General Sales Manager for the Eastern Division. Mr. Francis started his career with Corn Products in the New York Sales Department, 1914. He

HAROLD FRANCIS

left the company to serve with the army during World War I and was discharged with the rank of Lieutenant. Returning to Corn Products, Mr. Francis was transferred to the Pittsburgh Branch Office and in 1927 became Branch Manager there. Early in 1945 he was made Branch Manager of the Chicago Office and two years later came to New York as Assistant Division Manager.

CANADIAN HEADQUARTERS AT PACKAGING EXPOSITION

The Packaging Association of Canada has arranged for special headquarters for Canadian visitors in the Shelburne Hotel for the AMA National Packaging Exposition and Conference to be held in Atlantic City next month. The headquarters at the Shelburne will be open from 9 a.m. to 9 p.m. daily from April 1 through 4. Registration will be taken and badges for Canadians issued.

IN BROKERAGE FIELD

John A. McTighe, formerly a buyer for the New York City Board of Education, has joined the sales staff of the Eastern States Brokerage Company, New York City.

NEW JERSEY CANNERS OFFICERS

At the Annual Meeting of the New Jersey Canners Association the following officers were elected: Norman Bauer, Stokely Foods, Inc., Trenton, President; Dr. Frank App, Seabrook Farms Company, Bridgeton, Vice-President; Newlin B. Watson, R. S. Watson & Son, Greenwich, was reelected Secretary-Treasurer.

CANADIAN FOOD PROCESSORS ELECT

F. D. Mathers, Westminster Canners, Ltd., New Westminster, B.C., was elected President of the Canadian Food Processors Association at the recent meeting of the organization. Other officers elected include: S. Preston, Preston's Pure Preserves, Ltd., Ville St. Laurent, P. Q., First Vice-President; T. V. Proctor, Libby, McNeill & Libby of Canada, Ltd., Chatham, Ontario, Second Vice-President; W. H. Heeney, Heeney Frosted Foods, Ltd., La Prairie, P. Q., Treasurer reelected; and P. R. Robinson, Ottawa, Ontario, reappointed Secretary-Manager.

The 1953 Convention will be held in Victoria, B.C., and although the date has not yet been set, it will probably be during the first week of February, so that delegates may attend the National Canners Association's Convention in Chicago expected to be held later in the month.

DR. CLARK HEADS C.M.I. COMMITTEE

Dr. Berton S. Clark, scientific director of American Can Company's Research and Technical Department, has been appointed chairman of the Can Manufacturers Institute Research Committee for 1952.

This committee is responsible for research on technical problems of industry-wide importance. Development of constructive methods of tin conservation for national defense is its most important current project.

A recognized authority on food technology and packaging with more than 40 years experience, Dr. Clark was a delegate and speaker at the second International Congress on Canned Foods held at Paris last year. He is credited with numerous contributions to the canning industry, among them the development of corrosion-resistant tin plate.

Dr. Clark was director of research for American Can Company prior to his appointment as over-all scientific director last December. During his 37 years with the company he also has found time to participate in numerous other activities directly concerned with the canning industry.

MILES ELECTED STANGE VICE-PRESIDENT

Wm. B. Durling, President of Wm. J. Stange Co., announced that Theodore R. Miles was elected Vice-President by the Board of Directors.

Mr. Miles, who joined Stange in 1947, had been Production Manager in charge of the company's Seasoning, Certified Food Color and Antioxidant divisions. As

THEODORE R. MILES

Vice-President, he will be responsible for the management of production, inventory, and personel in all plants. In addition, he will handle such legal problems as are presented by the Defense Production Act including Wage Stabilization and priorities.

CANCO ADDS PAPER MILK CONTAINERS AT PORTLAND

The American Can Company is expanding operations at the Portland, Oregon can manufacturing plant to manufacture paper milk containers. It will be the first complete operation in the State. When the installation is in full operation it will employ more than 100 men and women and have a rated capacity of up to 200 million paper milk containers annually in quart, pint and half pint sizes.

JOBBERS TO MEET

Louisiana Wholesale Grocers' Association will hold its 7th annual convention at the Hotel Roosevelt in New Orleans April 24-26, inclusive, Ford S. Lacey, secretary-manager, announces.

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Canned Whole Milk Developments

Two recent developments in the production of canned whole milk, indicate that the day may not be far off, when the consumer will be able to store her milk supply on the pantry shelf without benefit of refrigeration. The International Milk Processors, Inc., of Chicago, whose East Stanwood, Washington plant has been supplying the Armed Forces in Alaska with fresh canned milk for a good many months, soon will begin operation in Ridgeland, Wisconsin. The new plant will can from one hundred to one hundred and fifty thousand pounds of fresh whole milk daily. The product of this new dairy, the first of its kind in the Mid-West, will be called "Med-O-Milk". This is the cow-to-can process, where the milk is taken directly from the cow and moved through homogenizing, pasteurizing, and sterilizing equipment into the can without ever coming into contact with air.

A San Francisco model poses with the new canned sterile milk of the Golden State Company, Ltd. The milk is said to keep its flavor and quality for a year.

The second development of interest is the application for a patent on a process to produce canned sterile whole milk, by Golden State Company, Ltd., major California dairy products firm. Announcement of the application according to J. R. Little, Golden State President, follows almost fifteen years of research on this project by the company. For the past six years the development of the process has been under the direction of Dr. A. P. Stuart, Research Director. Like the other process, it utilizes the asceptic canning equipment developed by the Dole Engineering Company, but differs in that the normal manner of handling milk from the farm to the plant is satisfactory. The flavor and quality, held for a period up to a year, is said to be identical to that of fresh milk. The patent application also covers canned sterile cream and other fluid dairy products.

Products made by this process can be distributed to areas of short milk supply all over the world, it can also be used by the Armed Forces, for camping trips, summer camps, and in flight feeding on airplanes, on merchant ships, and by many other groups isolated temporarily or permanently from the supply of fresh milk. There are also many other unexplored possibilities, among them the distribution of canned sterile whole milk through stores in case lots. Golden State will launch consumers acceptance tests in the very near future. Most of the canned milk will be packaged in quart cans. The firm will also produce smaller cans which can be sold in vending machines like soda pop.

PFIZER SCIENTISTS REPORT ON FAR-EASTERN ANTIBIOTICS SURVEY

The use of antibiotics in combating diseases and in increasing food production is regarded by scientific and political leaders in Japan and India as a major factor in meeting the enormous problems produced by overpopulation and disease in those countries, according to Jasper H. Kane and Charles A. Werner, research scientists of Chas. Pfizer & Co., Inc. The two scientists returned this week from a six-week tour of the Far East.

The importance of antibiotics in Far Eastern countries is reflected, Mr. Kane said, in the fact that the Japanese have already become self-sufficient in the production of penicillin and are rapidly increasing their manufacture of streptomycin. The Indian Government-United Nations penicillin plant is expected to be in large scale production in 1953.

Mr. Kane is Director of Biochemical Research and Production for Chas. Pfizer & Co., Inc., Brooklyn, and a member of the board of directors; Dr. Werner is Medical Director of Pfizer Overseas, Inc. During their tour they addressed the Indian Science Congress in Calcutta, the Tokyo Antibiotics Research Association and the Japanese Medical Association; and they conferred with Premier Jawaharlal Nehru, specialists in Japan's Ministry of Agriculture, and medical authorities from the universities of Western Japan.

CALENDAR OF EVENTS

MARCH 3-5, 1952 — Annual Meeting, National Preservers Association, Congress Hotel, Chicago, Ill.

MARCH 3-7, 1952 — Annual Convention, National Association of Frozen Food Packers, Hotel Stevens, Chicago, Ill.

MARCH 6-7, 1952—40th Annual Convention, Utah Canners Association, Hotel Utah, Salt Lake City, Utah.

MARCH 13-14, 1952 — Annual Meeting, Northwest Canners Association, Gearhart Hotel, Gearhart, Ore.

MARCH 17-18, 1952—Annual Directors Meeting, Canners League of California, Santa Barbara Biltmore, Santa Barbara, Calif.

MARCH 19-20, 1952 — Annual Canners, Freezers & Fieldmen's Short Course, Department of Horticulture, University of Maryland, College Park, Md.

MARCH 20-21, 1952—Spring Meeting, Tri-State Packers Association, Lord Baltimore Hotel, Baltimore, Md.

MARCH 24-25, 1952 — Virginia Canners School, Virginia Agricultural Extension Service, Hotel Richmond, Richmond, Va.

MARCH 30-31, 1952 — Semi-Annual Meeting, Packaging Machinery Manufacturers Institute, Hotel Dennis, Atlantic City, N. J.

APRIL 10, 1952 — Spring Meeting, Indiana Canners Association, Claypool Hotel, Indianapolis, Ind.

MAY 7-9, 1952—7th Industrial Waste Conference, Purdue University, Memorial Union, Lafayette, Ind.

JUNE 8-12, 1952 — Annual Meeting, Institute of Food Technologists, Grand Rapids, Mich.

JUNE 9-10, 1952 — Spring Meeting, Michigan Canners Association, Park Place Hotel, Traverse City, Mich.

JULY 9-10, 1952 — Annual Meeting, National Kraut Packers Association, Catawba Cliffs Beach Club, near Port Clinton, Ohio.

NOVEMBER 6, 1952—Fall Meeting, Illinois Canners Association, Bismarck Hotel, Chicago, Ill.

NOVEMBER 20-21, 1952 — Annual Convention, Indiana Canners Association, French Lick Springs Hotel, French Lick, Ind.

NOVEMBER 24-25, 1952 — 38th Annual Convention, Pennsylvania Canners Association, Penn Harris Hotel, Harrisburg, Pa.

DECEMBER 1-2, 1952—Fall Meeting, Michigan Canners Association, Pantlind Hotel, Grand Rapids, Mich.

DECEMBER 4-5, 1952—Annual Convention, Tri-State Packers Association, Atlantic City, N. J.

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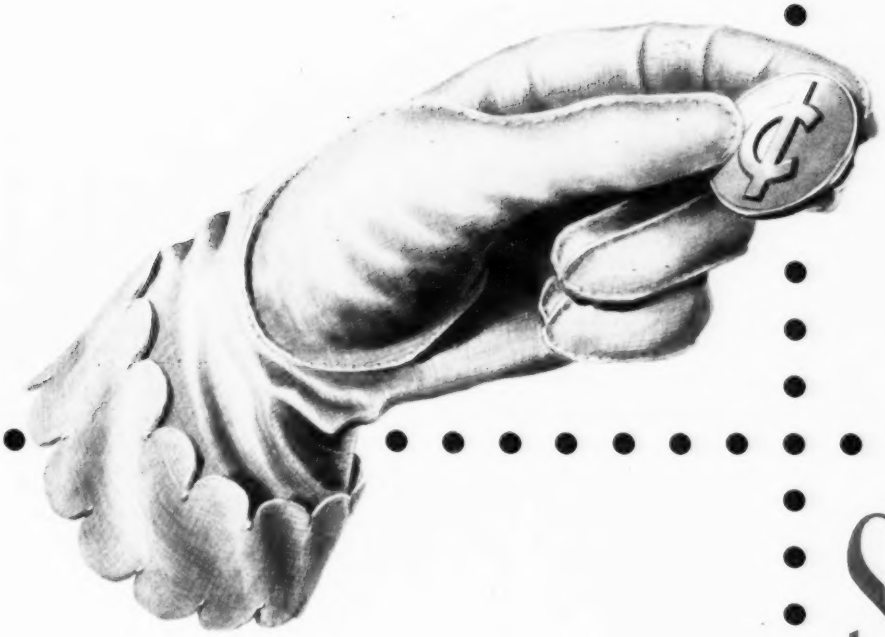

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Spray Irrigation as a Means of Cannery Waste Disposal

By N. H. Sanborn

Washington Research Laboratory, National Canners Association

The use of spray or sprinkler irrigation for the watering of crops has been known to agriculturists for many years. That this system of applying water to land could be adapted to waste disposal has been recognized only recently. The disposal of cannery waste waters in such a manner as to completely avoid stream pollution has quite naturally led to methods involving disposal on or into soil. Soil disposal methods include: Intermittent flooding onto porous soils; the "ridge and furrow" irrigation absorption system; absorption lagoons; retention of wastes in lagoons for a period of time sufficient to permit stabilization of the waste prior to ultimate discharge of the remaining waste; and finally, spray irrigation. Each of these systems has its own advantages and disadvantages.

For those not familiar with the equipment required in the agricultural sprinkler irrigation system and its adaptation to waste disposal, a brief description of the basic features involved is in order. Water or liquid waste is applied to the surface of the ground by means of a high-pressure sprinkler system. Usually, light weight aluminum or galvanized piping equipped with special couplings to permit rapid laying and moving of the pipe over the areas to be irrigated is used. An electric or gasoline pump delivers water under 35 to 100 pounds nozzle pressure to self-actuated revolving sprinklers. The objective in agricultural irrigation is to supply the minimum water required to produce maximum plant growth; in waste disposal the objective is to apply the maximum amount of waste water consistent with minimum damage to the prevailing vegetative growth and at the same time to avoid surface run-off.

Address delivered at the Canning Problems Conference of the National Canners Association at Atlantic City, N. J., Sunday afternoon, January 20, 1952.

FIRST USE OF METHOD

Historically, the first application of spray irrigation as a means of waste disposal appears to have been inaugurated in 1947 at the Hanover Canning Company at Hanover, Pensylvania (1). The operation of a combined lagoon and spray irrigation system which completely eliminated stream pollution at this plant apparently passed unnoticed. In 1949 Seabrook Farms in New Jersey investigated the possibilities of irrigation and in 1950 installed a spray irrigation system capable of handling their entire volume of waste (2). The year 1950 also witnessed the successful application of spray irrigation as a complete system of disposal at the Plainview, Minnesota plant of the Lakeside Packing Company and its trial application at two other Minnesota plants (3). In addition to the above pioneering companies, there were 19 additional spray irrigation systems in operation during 1951.

A complete list, so far as known, of the spray irrigation systems in operation during 1951 is as follows:

Wisconsin: Baker Canning Co., Theresa (Disposal of part of lagooned cannery wastes only); Brownsville Canning Co., Huistiford; Chilton Canning Co., St. Nazianz; Clyman Canning Co., Clyman; Country Gardens, Inc., Coleman; Loyal Canning Co., Loyal; Mammoth Spring Canning Co., Sussex and Oakfield; Oconomowoc Canning Co., Sun Prairie and Waunakee; Rockfield Canning Co., Granville.

Minnesota: Fairmont Canning Co., Fairmont and Winnebago; General Foods (Birds-Eye Snider Div.), Waseca; Green Giant Co., Blue Earth; Lakeside Packing Co., Plainview.

New Jersey: Francis H. Leggett & Co., Landisville; Seabrook Farms Co., Seabrook.

Iowa: Green Giant Co., Garrison.

Maryland: John H. Dulany & Son, Inc., Fruitland.

Michigan: Michigan Fruit Canners, Inc., Fennville.

Pennsylvania: Hanover Canning Co., Hanover (Disposal of lagooned cannery wastes only).

The adaptation of spray irrigation to waste disposal appears simple. Indeed, it has proven to be so at several canning plants, but these were small plants and the problems involved correspondingly small. Observations made at a number of instalations show that while the system offers great promise as one method of disposal it is subject to limitations. Very definitely it is not a panacea for all liquid cannery waste disposal problems.

OPERATION AND EQUIPMENT

Before discussing the major considerations and problems which should serve as a basis for evaluating the possibilities of utilizing spray irrigation brief reference to the equipment or operation of the system at several plants will be made.

1. Seabrook Farms, Seabrook, New Jersey. The results obtained at this plant are by far the most spectacular. Processing of vegetables, principally for freezing, extends from spring to late fall. An average of about eight million gallons of waste waters are produced per day. Before discharge into a 2-mile open canal leading to the irrigation area suspended solids are removed by primary sedimentation. When necessary the wastes are chlorinated to prevent odor development in the canal. Waste is pumped from 1,100 gallon per minute electric pumps located along the canal and delivered to 54 large rotary sprinklers located in a second-growth oak-pine wooded area. Each sprinkler delivers a spray to irrigate one acre. Instead of moving pipe lines, the spray nozzles are moved along the laterals. Waste is applied from a sprinkler station for a

period of 8 hours at the rate of one inch per hour. The nozzle is moved to the second station for an eight hour application, then to the third station, and finally returned to the first riser to repeat the cycle. A given area, therefore, receives 8 inches of waste per day for many consecutive days. This remarkable capacity for absorption is due primarily to a great depth of sandy soil of high permeability. However, the nature of the vegetative cover, in this case a wooded area, plays an important part in the rate of absorption.

2. Lakeside Packing Company, Plainview, Minnesota. The irrigation disposal system at this plant consisted of a 20-mesh rotary screen; a wet well constructed from a salvaged steel cooling tank and holding approximately 150,000 gallons; a vertical turbine pump unit powered by a 50 H.P. motor operated by a tape float control; approximately 6,400 feet of 7-inch aluminum piping for main feeder lines; and four portable aluminum lateral sprinkler lines, each consisting of 380 feet of 5-inch pipe and 600 feet of 4-inch pipe with each lateral carrying 25 $\frac{5}{16}$-inch x $\frac{7}{32}$-inch sprinklers rated at 14.2 gallons per minute at 35 pounds nozzle pressure. An auxiliary 15 H.P. portable pump powered by a gas engine is available to irrigate for an emergency storage lagoon should temporary storage of waste be required. Of the crop land (peas, corn, alfalfa and timothy) available for irrigation 72 acres were used in 1950 and 128 acres in 1951. The topography of the land was rolling. The soil was a silt-loam underlain with clay. The estimated volume of waste disposal in 1950 was 16 million gallons from a combined pea and corn pack of 295,000 cases No. 2 equivalents. The rate of waste application varied depending upon the demands of the particular crop being irrigated.

3. Green Giant Company, Blue Earth, Minnesota. Irrigation was used at this plant during the 1951 corn pack to dispose of an average of 450,000 gallons per day on a heavy loam. A total of 22.5 acres of rolling land were irrigated, of which 15 acres was pasture land and the balance wooded. Waste was applied at a rate of 2.5 to 3 inches per setting and the spray nozzles moved every 12 to 15 hours.

4. Mammoth Spring Canning Co., Oakfield, Wisconsin. At this plant pea wastes are produced at a rate of approximately 100 g.p.m. A single lateral of 4 inch aluminum pipe 1,200 feet long equipped with 20 sprinklers spaced 60 feet apart, each sprinkler having $\frac{5}{16}$-inch x $\frac{7}{32}$-inch nozzle openings and delivering 25 g.p.m. at 45 pound pressure, served in effect as two laterals. The valve on the risers of the first 10 sprinklers would be turned off and spraying done by the second group of 10 sprinklers for a period of time which normally was one day. The following day the first group of sprinklers would be used after which the lateral would be moved to a new setting at a distance of 60 feet. Fifiteen acres of a silt-loam soil sown to mixed grasses (intermediate wheat, smooth broom, orchard, and alta fescue) were available but only about 7 acres were required for waste irrigation.

IMPORTANCE OF COVER CROP

An excellent illustration of the important part that a cover crop plays in the rate of absorption was observed at this plant. The grass mixture was sown (drilled in rows) about the first of May. Starting on July 25 the grass crop was cut. Wastes applied at this time to the uncut portion were absorbed at a rate which permitted sprinkling on the same area for the entire day's pack. The cut portion of the field exposed considerable bare ground between the planting rows and wastes were not absorbed as readily. Only about one-half as much waste could be absorbed. On one portion which was cut following a rain, packing of the soil by cutting and hauling operations further reduced the rate of absorption to only about one-quarter of that obtained on uncut grass.

COST OF METHOD

Comments on the cost of spray irrigation have been purposely omitted in connection with the discussion of individual installations. The translation of available cost data to a common basis is difficult because of a number of reasons among which might be mentioned: (1) variations in land values; (2) differences in (a) rates of soil absortion or (b) rate of application or (c) the usage to which the irrigated land is put (crop production, cattle grazing, or purely as a waste disposal area) which influence the acreage required for the disposal of the same volume of waste; (3) differences as great as 100 percent in the waste output per case of the same produce packed; (4) great variations in the distance of the plant from the absorption area; (5) the necessity in some cases of purchasing rights-of-ways; (6) the extra cost involved in the crossing of roads, railroads or streams; (7) the necessity in some cases of laying the entire main pipe line underground, and (8) great differences in utilization of existing equipment such as pipe line to lagoons or other points of disposal, screening units, surge sumps, etc.

Even with the above uncertainties it is of interest to present the costs involved in converting existing methods of disposal to spray irrigation. In the following eight cases, 6 represent wastes from the canning of peas and 2 from corn canning. A spray irrigation installation capable of handling the volume of waste produced during the canning of peas will in many cases be adequate to dispose of wastes incidental to the canning of other products. Case packs are reported as No. 2 equivalents.

Plant A—$22,000 for irrigation equipment to handle the wastes from the packing of 190,000 cases. Plant B—$15,000 for irrigation equipment for a volume of waste averaging 900,000 gallons. Plant C—$12,500 for irrigation equipment to handle at a maximum the waste from 10,000 cases per day. Plant D—$9,500 for an irrigation system to dispose of the wastes from the canning of 140,000 cases of corn. Wastes were pumped through a 4-inch aluminum pipe for a distance of one mile. Plant E—$5,500 for a system to spray an average volume of 450,000 gallons per day. Plant F—$3,200 equipment costs for the wastes from total pea pack of 82,000 cases. Plant G—$3,200 spray equipment costs to handle wastes from a total pea pack of 76,000 cases. Plant H—$2,000 for a plant packing an average of 3,500 cases with a miximum of 5,500 cases.

The above cost figures apply to 8 seasonal canners located in the Midwest. If complete data had been available to include land, screening facilities and existing equipment at prevailing prices it is estimated that total over-all costs would not exceed twice those given. At two large eastern installations total costs, due in part to special circumstances, greatly exceeded costs of installations in other areas. However, in every case the over-all cost of spray irrigation compares favorably with, or is less than, other generally available standard methods of disposal. The difference in costs between a spray irrigation installation and a complete bio-filtration system so greatly favors spray irrigation that no reasonable comparison exists. As favorable as spray irrigation is cost-wise it must not be assumed that in every case spray irrigation will be the most economical or the preferred method of disposal.

PROBLEMS IN USE OF METHOD

As a method of waste disposal spray irrigation is in its infancy. Study and inspection of a number of spray irrigation installations has disclosed a number of problems and pointed to certain limitations.

Of prime importance is the availability of land within economic pumping distance. It many be more economical to employ spray irrigation at a distant site, say 2 miles, than to treat by another method at or close to the plant or to be subject to the treatment service charges expected by some municipal treatment works. For disposal at distant site it may be more economical to employ two pumpings; the first one with a low pressure pump to a surge pit located at the site to be sprayed, followed by a high pressure pumping for spray irrigation in a relatively short pipe system.

Soil absorption characteristics play an important part in spray irrigation. At the present time it does not appear that a reliable method exists to predetermine the rate of water absorption or the capacity of the sub-surface soil to assimulate

water. Until such a method is available and readily adaptable the fundamental question of how much land is required to dispose of a given quantity of waste remains unanswered. Consultation with local well drillers, state geologists, state universities, and information from soil borings can be useful in selecting the most suitabe area with respect to rate of absorption, capacity and knowledge concerning the likelihood of polluting underground water strata.

AVOID WELL POLLUTION

The possibility of polluting wells or of waste entering an underground strata which shortcircuits to a stream must always be a calculated risk. While of infrequent occurrence it has been known to occur from a "ridge-and-furrow" irrigation field, a lagoon, and a spray irrigation installation.

It is felt that probably the most important problem requiring extensive investigation is the relation of the type of ground or vegetative cover growth to waste absorption. The absorptive capacity of ground for pure water depends upon several factors. Applying cannery wastes carrying a suspended solid content up to about 6,000 ppm presents an added problem. Whenever a vegetative growth is absent or thin, objectionable mats may form. Even with a waste such as beet waste carrying a high concentration of suspended solids no solids could be detected on the ground beneath a good vegetative growth.

During the 1951 survey it was repeatedly observed that, on the same field, poor absorption occurred where bare ground was exposed or the vegetal cover was sparse. This is in line with reports of the Soil Conservation Service on the beneficial effect of ground covers on absorption of rainfall. Undoubtedly the greatest rate of absorption was that which obtained on the wooded sandy area at Seabrook Farms but such areas are found only rarely in canning regions. That woods with its accumulated litter of humus provides an excellent vegetal cover is confirmed by the absorption obtained at the Francis H. Leggett Co. in nearby Landisville, New Jersey, where a wooded area on sandy soil is spray irrigated.

CHOICE OF COVER CROP

Most canners will have to look to farm fields for their irrigation area. In such areas the best absorptions observed were on well established pastures or on fields with dense grass or weed growths. At the present time preference would be given to a short grass pasture cover crop. Alfalfa has been mentioned by some as a suitable cover crop. Until it attains a certain height and before it begins to mat down under repeated spraying alfalfa (and tall grasses) makes a good vegetal cover. On the stands observed, which admittedly were not as thick as they might have been, absorption was not so good after the crop had been harvested for hay. It has been suggested that the deep rooted al-

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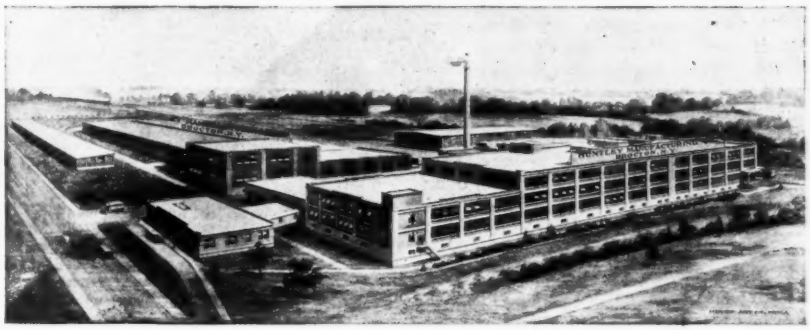

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falfa may not tolerate as heavy applications of water as shallow rooted grasses.

The type of cover crop may be dictated by the use to which the irrigated land is put. A tendency has been noted on the part of some canners to view waste spray irrigation as a means of increasing crop yields. Without doubt, the judicious application of certain cannery wastes to certain growing crops will increase yields, if there is less than optimum soil moisture. Such application becomes an agricultural problem with the rate and frequency of watering dependent upon the needs of the crop. Unless extensive crop acreage is available, it is inevitable that at times an excess of waste over that required for crop utilization will need disposal in some manner. It is believed that spray irrigation should be looked upon primarily as a means of waste disposal. Any utilization of waste for agricultural purposes should be a secondary consideration. It would appear, however, that spraying on pastureland offers not only a promising method of disposal for large quantities of waste, but also a financial return through the grazing of cattle.

Any cover crop requires mineral nutrients. To what extent mineral nutrients will be leached out by the application of abnormal high quantities of water is not known. The waste itself will supply some nutrients. Pea waste, for example, has been found to contain on an average 46 ppm of total organic nitrogen and 9 ppm ammonia nitrogen. Pea waste has a total phosphorus content of about 8 ppm of which 5 ppm are in the form of soluble phosphate. Corn waste has an average of 54 ppm total organic nitrogen and 2 ppm ammonia nitrogen. Total phosphorus averages 11 ppm of which 5 ppm are soluble phosphates. Should nitrogen or other soluble fertilizers be found to be required, its addition to the spray lines is easily accomplished with available auxiliary attachments. Studies involving soil analyses and crop and pasture yields over a period of several years are needed to answer questions raised by cannery waste irrigation. This is particularly true for a waste with an abnormally high pH from lye peeling operations. The very high pH of some wastes from lye peeling raises serious questions whether any vegetative growth can be maintained. Also, how long will aluminum piping withstand a pH of 10 to 11?

IMPORTANCE OF SCREENING

The greatest single source of operational difficulty was due to incomplete screening. On a few occasions pea vines, pieces of corn cob or miscellaneous trash gave trouble in the pumps. Relatively little difficulty was experienced in plugging of sprinkler nozzles. The major trouble was due to the collection of solids around the screen protecting the suction intake thereby adversely affecting both pump capacity and pump pressure. Correction of screening difficulties is relatively simple and inexpensive. Screening which hitherto has been acceptable for other forms of disposal is quite likely to be inadequate for spray irrigation.

Some State Boards of Health require that wastes be screened through 20, 30, or 40 mesh screens before admittance to a stream. Such requirements need not apply to spray irrigation. A perfect screening job through a 10 mesh screen would be preferable to occasional spillovers from finer screens. (Water cooled gas engines used to power irrigation pumps utilize the waste for cooling. The cooling line is equipped with a strainer. The manufacturer should be consulted to determine whether wastes passing a 10 mesh screen will plug the strainer.) Screened solids or wind-blown leaves or trash must not enter the flow screened wastes ahead of the pump.

SIZE OF SUMP

The question of how large the surge sump should be remains to be determined. For complete freedom from odors wastes should be applied to the absorption area in a fresh condition. In actual installations the surge sump or reservoir feeding the spray pumps vary from 1,000 gallons to the 2 mile canal at Seabrook Farms. A large surge sump has the advantage of providing storage capacity in the event of a temporary inability to irrigate and to provide a volume of waste for a more nearly continuous spraying operation if such is desired, e.g., use of gasoline powered pumps or large electric motors. A large sump has the disadvantage that the longer retention time permits the development of some septicity which may become objectionable when the wastes are sprayed. Also, a large sump acts as a settling basin for putrescible solids the disposal of which may present a problem. For most canners having a moderate volume of waste a concrete surge sump of 2 to 4 hours holdign capacity would appear ample. If provision for emergency overflow can be provided and if a small float operated electric pump can be used, a sump holding only 15 minutes peak flow is satisfactory.

Many of the canners employing spray irrigation previously used lagoons. These lagoons or portions of them have been retained for emergency disposal of wastes. It would be prudent in every case to include emergency storage capacity as part of the irrigation installation.

Two sizes of sprinklers are in general use although a wide selection of sizes is available. A large sprinkler which irrigates an area of an acre or more appears particularly well adapted to spraying in wooded areas. Most of the sprinklers used for field spraying have nozzle openings of $\frac{7}{8}$-inch x $3\frac{1}{2}$-inch. These sprinklers spray over a diameter of 120 to 140 feet. Information on the optimum sprinkler size for the different usages or conditions under which waste spraying may be conducted is needed.

The self-draining feature of quick coupling pipe for laterals which needs to be moved is essential. On main distribution lines, however, some canners have experienced leakage with subsequent crop damage or odor production. Leakage occurs at periods when pumps stop operating and the line pressure drops. Light weight piping is available with special water-tight fittings.

On windy days spray may be blown onto roads or adjacent property. The system should be set up to avoid trouble from this source.

The disposal of pea stack seepage along with factory wastes should be approached cautiously and in an experimental manner, if at all. One case of crop burning is known to have occurred. Remember that the flow of stack seepage continues at times when dilution with factory waste is not available.

SPRAY IRRIGATION IN WINTER

Normally one does not associate spray irrigation with winter canning in those regions where freezing temperatures may be encountered; however, possibilities along this line suggest themselves. For example, in a region where freezing weather alternates frequently with mild temperatures it should be possible to impound wastes in a storage lagoon during those days when the ground is frozen or spraying is impossible because the temperature is below freezing. When conditions favor spraying wastes can be irrigated at a rate great enough to dispose of both the currently produced factory wastes and the impounded wastes. It is believed that cool weather will permit temporary waste storage without objectionable odors being released when the waste is subsequently sprayed.

The installation of an irrigation system should not be undertaken without consultation with specialists. As previously mentioned, the advice of state geologists, state university agricultural engineers and local well drillers should be sought to evaluate absorption sites with respect to absorption potentialities and evaluation of local well pollution probabilities. If the canning personnel includes competent engineers they should be able with technical advice from manufacturers of irrigation pipe and sprinklers to design and install a spray irrigation system.

There are many things to consider. For example, a factor in maximum rate of absorption is uniformity of spray distribution. This is dependent upon maintaining the correct pressure at the sprinkler nozzle throughout the entire length of the sprinkler lateral for the particular make of sprinkler used. The solution of this problem depends upon the length of the lateral, the size or sizes of pipe in the lateral, the size of the sprinkler (g.p.m.), the number of sprinklers, friction losses, and land contours. There is an economic problem involved

in the size of the laterals. Spray laterals of great length of large size pipe may require several men and a truck for moving. Cases are known where wet field conditions resulted in bogging down of the truck so that tractors had to be used, with the result that moving was delayed, expenses increased, and damage was done to crops. The use of several relatively short 4-inch aluminum laterals appears to be more practical.

These and other considerations suggest that many canners would do well to consider the use of a reliable firm specializing in the installation of spray irrigation systems. The canner should also consult freely with the engineers from the State Board of Health. Their advice and counsel on many points will be valuable.

In appraising the present status of spray irrigation as a method of disposal it is apparent that while there are problems requiring further study, some of which involve extensive field experience to meet the varying conditions of an industry of widespread geographical distribution with a great diversity of wastes, the collective experience from some 22 installations indicate that spray irrigation will become an important method of waste disposal.

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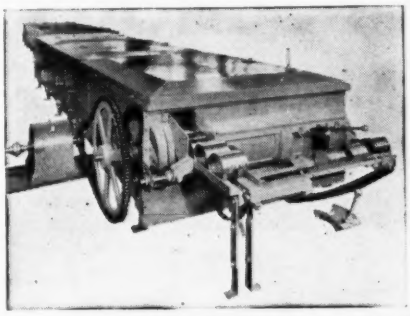
1. "Some Rights and Wrongs of Cannery Waste Treatment," C. L. Siebert and Claire Allison, *Water and Sewage Works*, *95* 227, (1948).
2. "Agricultural Climatology at Seabrook Farms", C. W. Thornthwaite, *Weatherwise*, 4,27 (April 1951).
3. "Disposal of Liquid Wastes by the Irrigation Method at Vegetable Canning Plants in Minnesota", J. A. Drake and F. K. Bieri, *Proceedings of the Sixth Industrial Waste Conference*, Purdue Univ. (1951).

SANITATION MANUAL PUBLISHED

"Sanitation for the Food-Preservation Industries," a sanitation operational book written by the Association of Food Industry Sanitarians in cooperation with the National Canners Association, was issued February 15, 1952, by the McGraw-Hill Publishing Company, Inc., 330 West 42nd Street, New York 18, New York. The Price is $5.00 per copy.

The 284-page book contains practical information based on working experience in the canning, freezing, and dehydration industries, submitted by A.F.I.S. members. More than 40 correspondents who are experts in their respective related fields gave additional editorial assistance. The A.F.I.S. editorial committee coordinated and supplemented the material and prepared the manuscripts.

Chapter titles indicate the subjects of concern to the food plant sanitarian. These are: Organization of a sanitation program; inspection techniques; housekeeping; animal, bird, and insect pests; significance of microorganisms; water supply; construction and maintenance of building and equipment; cleaning; chlorination; employee facilities and industrial hygiene; feeding and housing; waste treatment and disposal; and laboratory aids to the sanitation program.



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WEDNESDAY, MARCH 19, 1952

FIRST GENERAL SESSION—Symons Hall Auditorium

10:00 a.m. — Introduction and School Objectives; Economics Prospects and Acreage Goals; Federal - State Inspection; Announcements.

CORN SEMINAR—Symons Hall Auditorium

11:00 a.m.—This is to be handled in question type of presentations divided into the following categories with technical personnel on hand to discuss relevant questions raised.
Seed, Seeding and Varieties; Fertilization and Weed Control; Insect Control and Equipment; Harvesting; Cost of Operations Within a Corn Canning Plant.

SWEET POTATOES—Symons Hall

11:00 a.m.—Current Status of Sweet Potato Cracking Research; Cultural Factors as Related to Yield and Grade; Varieties for Canning; Variety Studies.

BROCCOLI AND GREENS—Room 105—Horticulture

11:00 a.m.—Control of Broccoli Insects; Varieties for Freezing; Grower Experiences.

TOMATO LABORATORY SESSION—Room 10—Horticulture

11:00 a.m. Raw Stock Grade Models; Permanent Mold Slides; Tomato Color Determination; Detection of Added Water; Determining Consistency of Tomato Products; Measuring Specks; PMA Grading Canned Tomatoes, Catsup, Puree, Juice; Tomato Diseases; Tomato Insects; Insect Fragments Determination and Counts.

CORN SEMINAR—Symons Hall Auditorium

2:00 p.m.—Continuation of morning session

TOMATO LABORATORY SESSION—Room 10—Horticulture

2:00 p.m.—Continuation of morning session

SWEET POTATO LABORATORY—Room 11—Horticulture

2:00 p.m.—Variety Cutting Bee; Tests of Firmness, Fiber and Color; PMA Grading—Canned; Grade Models.

PICKLES AND PEPPERS—Room 202—Horticulture

2:00 p.m.—Frequency of Harvesting on Yields, Grade and Returns; Insecticides and Yields of Cucumbers and Pickles; Three Years Results on Spraying Peppers for Disease Control; Increased Pepper Yields Through Virus Disease Control; Breeding for Virus Resistance in Peppers.

ASPARAGUS—Room 105—Horticulture

2:00 p.m.—Economic Status of Asparagus Production; Weed Control; Effects of Insecticides on Quality of Asparagus.
Laboratory—PMA Canned & Frozen Grades; F & D Standards Progress; Fibrometer.

SNAP BEANS—Room 205—Horticulture

2:00 p.m.—Snap Bean Harvester; Time & Frequency of Harvest in Relation to Yield; Varieties for Processing; New Insecticides for Bean Beetle Control.

SOCIAL HOUR

5:00 p.m.—Prince George's Country Club

DINNER

6:00 p.m.—Prince George's Country Club

SECOND GENERAL SESSION—Prince George's Country Club

7:15 p.m.—Processing Crops in Our Agricultural Economy.
This is to be handled in question type of presentations with special emphasis being placed on the advantages of growing crops for processing. Technical personnel will be on hand to discuss relevant questions raised. Among those expected in the technical personnel category are:

Dr. Paul E. Nystrom, *Chairman;* Howard L. Stier, Albin O. Kuhn, Jimmy Outhouse, Axley, Francis Stark, Gordon Cairns, I. C. Haut, Nissley, E. P. Brasher, H. R. Shoemaker, Wm. Henderson, Dave Tucker. In short, all phases of agriculture including Vegetables, Fruits, Livestock, Dairy, Agronomy, Soils, Economics, Labor will be on hand to point up the benefits of processing crops. Here is an opportunity to find out whether your present conceptions of processing crops are facts or fables.

THURSDAY, MARCH 20, 1952

THIRD GENERAL SESSION—Symons Hall Auditorium

9:00 a.m.—Consumer Preferences and Merchandising; Traffic Study to Determine Freight Rates of Canning Crops; The Nematode Problem on Del-Mar-Va Peninsula; Results with Soil Analysis; Announcements.

TOMATO SEMINAR—Symons Hall Auditorium

10:15 a.m.—This is to be handled in question type of presentations divided into the following categories with technical personnel on hand to discuss relevant questions raised.
Varieties and Fertilizing; Plants, Planting Distances; Diseases and Insects; Harvesting; Grading; Ten Ton Tomato Clubs; Economic Aspects of Tomato Industry.

PEAS—Room 205—Horticulture

10:15 a.m.—Recent Developments in Control of Pea Aphid; Weed Control; Varieties; Grading of Peas; Status of Food & Drug Standards for Frozen Peas.

SNAP BEAN LABORATORY—Room 11—Horticulture

10:15 a.m.—PMA Grades, Raw Stock; Food & Drug Standards Exhibit; PMA Processed Grades & Grading; Fiber Pressure Tester; Official Food & Drug Fiber Method; Rapid Fibre Method.

CORN LABORATORY—Room 10—Horticulture

10:15 a.m.—Insects Exhibit; Succulometer; Food & Drug Standards Exhibit; Consistometer; PMA Processed Grades & Grading; Alcohol Insoluble Solids Determination; Steinlite Moisture Determination; Spreadmeter; Stormer Viscosimeter; Brookfield Viscometer; Bostwick Consistometer; Off Flavors in Corn From Spraying; Insect Fragments; Corn Chowder.

LIMA BEANS—Room 105—Horticulture

10:15 a.m.—Varieties; Weed Control; Problems with Setting of Lima Beans; Measuring Quality in Selection & Viner Performance; New Facts about Downy Mildew.

TOMATO SEMINAR—Symons Hall Auditorium

2:00 p.m.—Continuation of Morning Session

STRAWBERRY AND PEACH LABORATORY—Room 105—Horticulture

2:00 p.m.—Cutting Bee—Frozen.

CORN LABORATORY—Room 10—Horticulture

2:00 p.m.—Continuation of morning session

PEA AND BEAN LABORATORY—Room 11—Horticulture

2:00 p.m.—Alcohol Insoluble Solids Determination; Brine Separation; Tenderometer; Shear Press; Texture Meter; PMA Grades & Grading—Raw & Processed; Lima Bean Downy Mildew and Ascochyta Blight.

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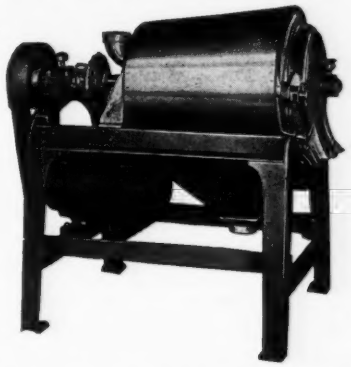

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FUTURE FARMERS? Could be, but they are already full fledged canner-growers now. These and 16 other boys like them, members of Future Farmers of America chapters, grew seven different canning crops, totaling 103 acres, for New York State canners. Photo shows President Jack Hemingway of the New York State Canners & Freezers Association, presenting the Albion Chapter first prize in the growing contest sponsored by the Association. Four FFA Chapters won citations and prizes totaling $225. Other chapter winners in order were Perry, Williamson and Geneva. Net profit for the group amounted to $6,118.58.

Dr. P. J. Chapman, Geneva Experiment Station (left) asks a question on insecticide control at the 27th Annual Raw Products Conference of the New York State Canners & Freezers Association, Inc., at Geneva, February 12 and 13. Others in the picture, left to right, all members of an insecticide panel, are, Francis Noon, Birds-Eye Division of General Foods Corporation, Albion; Dr. George Harvey, Geneva; and Dr. L. B. Norton, Cornell. The 1952 Conference was one of the most successful ever held, with attendance large and interest high.

New York State Growers Get Canning Crops Habit Early

Thanks to a wide awake Agricultural Committee of the New York State Canners & Freezers Association, young farm boys in the State of New York are finding out that growing canning crops has many attractive features. The Association annually sponsors a state-wide canning crops contest for Four H'ers, for vocational agriculture students and for Future Farmers of America chapters. Much to its satisfaction, the Association is finding that many of these young lads are far outstripping their elders in both the quality of the crop and the net return to the grower.

In 1951 fifteen year old Donald Britt of South Byron, New York, earned a net profit for himself of over $2,200 for the second successive year, in outdistancing all other Four H'ers in the contest. Besides the profit earned in the venture, Donald was given a wrist watch by President Jack Hemingway of the Association.

Young Donald, who is the son of Gerald Britt, former head of the Raw Products Department of Haxton Foods, Inc., Oakfield, New York earned a net profit of *$2,386.34* in 1951 with two canning crop projects, namely, 5 acres of tomatoes and 5.8 acres of beets. In earning this profit he had already charged his own time as an expense to each project so his profit is net. Last year he earned a profit of $2,211.00 with a 6 acre tomato project.

The five acre tomato project showed a net profit of nearly $1,400.00 for the season. His yield per acre was 20.4 tons of which 71 percent graded U. S. No. 1. He sprayed the crop six times and used 2330# of fertilizer per acre. Total receipts for the 5-acre crop amounted to $3,472.93 with expenses of $2,077.83.

The beet project, which was new this year, returned a net profit of $991.24 on a 5.8 acre field. A yield of 18.5 tons of topped beets per acre of which three-fourths were under 2½" in diameter attests to the excellent manner in which this crop was grown. Total income on the field amounted to $2,195.54 of which $1,204.30 had to be deducted for expenses.

Donald used a salt spray to control weeds in the beets and also added a nitrate of soda spray to improve the quality of his crop. He used a special fertilizer mixture at the rate of about 2100 pounds per acre.

Both crops were grown under contract to Haxton Foods, Inc., Oakfield.

In addition to the 4-H award, three high school vocational agriculture students and four Future Farmers of America Chapters won awards, presented by the Association, totaling $330.00 for excellence in processing crop production in 1951. The individual awards were won by three high school seniors.

CANNING CROPS HELP MARYLAND'S FARM ECONOMY

The growing importance of canning crops to Maryland's agricultural economy is shown by an analysis of 1951 government crop reports.

The analysis, made by the American Can Company, shows that canners last year provided 76 percent of Free State farmers' cash income from Maryland's eight major vegetable crops, compared with only 70 percent in 1950.

U. S. Department of Agriculture statistics reveal that receipts from canners rose from $10,766,000 to $14,582,000 in the state from 1950 to 1951. At the same time the value of fresh market produce dropped from $4,576,000 to $4,467,000.

"As a source of cash income to Maryland farmers, the eight canning vegetables are even more important than these statistics indicate," Dr. H. E. Michl, economist for the can-making firm, said.

"While field crops, such as oats, hay and feed corn, outrank processing crops in value, they are, for the most part, consumed on the farm and are not a direct source of cash income."

The eight canning vegetables which comprise most of the output of the state's canneries are asparagus, lima beans, snap beans, sweet corn, cucumbers, green peas, spinach and tomatoes.

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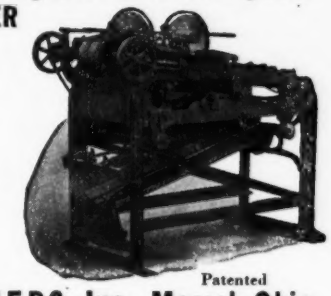

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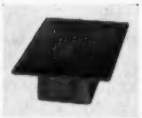

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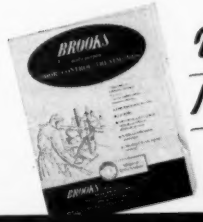

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MARKET NEWS

WEEKLY REVIEW

THE SITUATION — Canned Foods buying has become extremely selective as the line between the long and the short items becomes more definitely marked. Area, too, means a great deal in determining whether an item belongs on the long or the short list. Green beans, for instance, are very definitely on the short list in the East and Midwest, while in the Northwest they remain on the long list. To a lesser extent possibly, the same thing applies to tomato products. Corn and tomatoes are on the short list in all areas, as are sardines, tuna, most salmon items, RSP cherries, and sweet cherries. Lima beans and apple sauce are showing added strength this week, as is citrus, though the latter item is still more or less in the doldrums. Wide price differential continue on many fruits and tomato products.

APPLESAUCE—Applesauce is apparently headed for the big leagues in canned foods circles. It's an example of how improved quality will quickly attract the attention of the consumer. During the month of January 1952, while the pack of applesauce hit the low mark for the season of 591,785 actual cases, shipments of 1,345,120 cases probably set an all-time shipping record for this product for any one month. The January shipments are just about double the 755,000 cases shipped during the month of December, and give every indication that this popular pack, which has only recently bolted into second place among the fruits, may soon be giving canned peaches, the leader, a run for first place. August 1-February 1 shipments of 5,594,369 cases leave a February 1 supply of 6,779,412 cases.

Shipments of canned apples, according to the NCA statistics just released, amounted to 638,818 cases basis 6/10's during the month of January, for a total August 1-February 1 shipment of 2,315,830 cases. Stocks on hand February 1, 2,921,178 cases.

CANNERS' ACREAGE—Possibly because most canners until now are only preliminarily lining up acreage, without getting down to actual price figures, it's difficult to obtain a line on what most canners have in mind. We hear by the grapevine that Iowa canners expect to have to pay a little more for additional corn acreage they will want this year. Canners in Indiana are thinking in terms of about the same prices for tomatoes as last year. California fruit canners are already making their move to hold prices down at least to the level of last year.

It goes without saying that canners will have to pick up every savings in cost possible this coming year, in order to hold prices at an attractive level to the consumer. Just how successful they will be with the farmer will depend to a large extent on local conditions. The present price of hogs and the supply situation in steers, is surely favorable to the canner at this time. Even so, for best long range results, canners might do better to strike a happy medium in this matter of price. At least for the present, indications are that if the price is too high, canners might do better to lower their sites. On the other hand they wouldn't want to repeat the mistake one canner made on peas last year. One of the best farmers in Carroll County last week told the writer he wasn't much interested in growing peas this year. Last year his canner had bought on a graded basis for the first time, and paid him an average of $52 a ton. Knowing that any canner would be happy to have this farmer grow for him, we can't help but think that there was something wrong with this canner's system, either his schedule of rates, or his planting or harvesting schedule. Growers won't stand this kind of a bump many times.

Incidentally, before deciding to change the method of purchasing raw materials, canners might very well check into the new amendment to the pricing order covering the detremination of the raw material adjustments. It might very well make a difference in the final ceiling price.

SUPPLY, STOCKS AND SHIPMENTS

Compiled by NCA Division of Statistics

CANNED SWEET CORN

	1950-51	1951-52
	(Actual Cases)	
Carryover, August 1	6,466,680	373,375
Pack	21,645,243	30,188,540
Total Supply	28,111,923	30,561,915
Stocks, February 1	10,696,723	10,636,199
Shipments during January	3,605,297	2,804,478
Ship., August 1 to Feb. 1	17.415,200	19,925,716

February 1, 1951 stocks by arear: East 1,909,965; Mid-West 6,812,022; West 1,914,212. By style: Cream Style 6,520,699; Whole Grain 4,115,500.

CANNED PEAS

Carryover, June 1	2,141,400	1,110,783
Pack	32,725,536	37,837,387
Total Supply	34,866,936	38,948,170
Stocks, February 1	9,181,070	14.325,441
Shipments during January	3,443,448	2,965,648
Ship., June 1 to Feb. 1	25,685,866	24,622,729

February 1, 1952 stocks by area: N.Y. and Maine 630,052 cases Sweet; Mid-Atlantic 152,164 Alaskas, 475,378 Sweet; Mid-West 2,742,108 Alaskas, 6,324,723 Sweet; West 67,566 Alaskas, 3,933,450 Sweet. Total Alaskas 2,961,838, Total Sweet 11,363,603.

CANNED TOMATOES

Carryover, July 1	1,868,427	55,355
Pack	18,724,350	27,672,399
Total Supply	20,592,777	27,727,754
Stock, Feb. 1 (Calif. excl'd.)		3,695,899
Shipments during January (Calif. excluded)		1,217,107

February 1, 1952 stocks by area, actual cases: Northeast 213,732; Mid-Atlantic 1,660,768; Mid-West 1,280,277; West (except California) 310,284; South 230,838; California not available. There are 2,407,726 cases of 2's with balance evenly distributed in other sizes.

1951 TOMATO PULP PACK

Compiled by NCA Division of Statistics
(Actual Cases)

	Total
New York	155,265
Maryland	272,361
N. J. and Pa.	682,212
Ohio	129,962
Indiana	619,727
Michigan	156,571
Utah and Idaho	248,349
California	3,315,490
Other States	301,093
U. S. Total	5,881,030

This report is based on reports from all canners known to have packed tomato pulp and puree in 1951, together with estimates for those firms not reporting. It does not include pulp and puree for remanufacture in the same plant, but is intended to cover the pack of pulp and puree for sale only.

By can size the pack amounted to 139,565 cases 2's; 5,597 of 8 oz.; 515,516 of 1P; 835,336 of 2½'s; 4,084,057 of 10s; 178,177 of 5 gal. and 122,182 of Misc. Tin & Glass.

NEW YORK MARKET

Buying Definitely Selective—Some Offerings Of Tri-State Tomatoes—Fill-In Buying Of Peas — Eastern Beans Well Sold — Citrus Hardens As Fruit Costs Increase—Softness In Fruits—Strong Market On Tuna—Salmon Routine.

By "New York Stater"

New York, N.Y., Feb. 28, 1952

THE SITUATION—Mixed trends were evident in the canned foods market situation during the week. On the one hand, Florida citrus canners, under the spur of increased raw materials costs and a move by grower co-ops for a more stable juice market, advanced their prices on orange and blended juices. On the other hand, increasing softness was developing in some California canned fruits, with some buyers showing bearish price views on the situation. Stable markets prevailed during the period on most of the vegetable line, and canned fish was featured by a steadily tightening market position on domestic tuna.

THE OUTLOOK—Canned foods buying policy is developing along definitely selective lines, and distributors are giving the market a careful going-over before making any large-volume commitments. With the exception of a few short items, the trade is not exhibiting any too much confidence in the stability of current prices and this will present a problem when the 1952 packs must be priced.

TOMATOES — Moderate offerings of tomatoes are still reported out of the tri-states, with standards generally held on the basis of $1.15 for 1s, $1.45 for 303s, $1.55 for 2s, $2.25 for 2½s, and $7.00 and upwards for 10s, all f.o.b. canneries. In extra standards, limited blocks of 303s are reported available at $1.55, and

2s at $1.65. Tomato juice canners are being faced with low-priced competition from competitive citrus juices, and the market has eased a little in the face of a well sold-up position. Fancy 2s are reported offering for prompt shipment at $1.15, with 46-ounce at a low of $2.35, f.o.b. canneries. California tomato canners are getting a good demand and the market is strong, although most products are in easy position. Coast packers quote standard tomatoes at $1.55 on 2s, $1.95 on 2½s, and $7.25 on 10s, with fancy solid pack offerings confined to 2½s at $2.50 and 10s at $9.00. Fancy California tomato juice lists at $1.05 for 2s and $2.25 for 46-ounce, with 10s at $4.60, with 2½s puree at $2.00 for 1.045 gr., $2.35 for 1.06 gr., and $2.65 for 1.07 gr., all f.o.b. canneries.

PEAS—A little fill-in buying of peas is reported out of the tri-state area, with the going market currently on standard pod run sweets $1.10 for 303s, with Alaskas at $1.15. Limited offerings of standard 2s pod run Alaskas are reported at $1.25, with extra standards at $1.35, f.o.b. canneries. No change is reported in the pea situation in the midwest and in the northwest.

SPINACH—California canners expect to start running on their spring pack about mid-March, but have not named any prices as yet. Small unsold carryover stocks on the Coast are reported firmly held at $1.35 for fancy 2s, $1.65 for fancy 2½s, f.o.b.

BEANS—A steady market rules in the East, with canner holdings generally well sold up. Limited offerings of wax beans are reported from the midwest at $1.40 for 2s fancy cut 4-sieve and $1.60 for 2s fancy 1-2-3 sieve cut beans, f.o.b. cannery.

CITRUS—Strenuous efforts are being made by grower groups in Florida to bring order out of chaos in the processed citrus market, and a leading co-op has launched a campaign to get canners to pledge themselves to maintain a $2.25 basis for 46-ounce orange juice. While canners apparently are not going along with this effort, they have been forced to advance their selling prices, due to a rise in the cost of fruit for processing. Currently, orange juice 2s are held at 80 cents, with 46-ounce at $1.80, with blended juices now quoted at 77½ cents for 2s and $1.67½ for 46-ounce, f.o.b. Florida canneries. Grapefruit juice lists at 75 cents and upwards for 2s, with 46-ounce at $1.60, while fancy grapefruit sections, 2s, list at $1.65 to $1.67½ cents in most cases, with choice at $1.62½. Canners continue to hold fancy citrus salad 2s at $2.40, f.o.b.

CALIFORNIA FRUITS — With fruit cocktail and Bartlett pears showing continued softness, buyers are looking over the California fruit situation closely when coming into the market for replacements. Offerings of fancy fruit cocktail are reported down to $2.15 on No. 1 talls, with 2½s at $3.30 and 10s at $13.50, with choice at $2.10, $3.20 and $12.75, respectively. Bartlett pear offerings are reported as low as $2.60 for No. 1 tall fancy, with 2½s at $4.25, while choice is quoted at $2.40 and $3.50, respectively, and standards at $1.95 and $2.95. Some interest is reported in cling peaches, with choice generally held at $1.75 for 1s, $2.20-$2.25 for 2s, $2.80-$2.85 for 2½s, and $9.75-$10.00 for 10s, while fancy 2½s are held at a range of $2.90 to $3.05 by most sellers. Fruits-for-salad list at $2.85 for fancy 1s and $4.50 for 10s, with the market well sold up in most instances. Canners in the Northwest have cut pear prices, with 2½s now quoting at $4.20 and up for fancy, $3.80 for choice, and $3.00 for standards, f.o.b.

TUNA—California packers marketing under nationally-advertised brands reportedly have stolen a march on private label distributors through buying up much of the stocks which smaller canners had been holding. This has resulted in a strong market on the Coast, with fancy solid pack whitemeat now ranging all the way from $14.50 to $16.50 per case for halves, with solid pack lightmeat ranging $13.50 to $14.75, and chunks and lightmeat halves at $11.00 to $13.00 per case, f.o.b. Canners in the Northwest have booked a heavy volume of business during recent weeks, and the market is now well sold up, with canners quoting lightmeat chunks and flakes halves at $11.50, grated lightmeat halves at $10.00, and light and dark blended at $7.50, f.o.b. canneries. One company now packing tuna in Maine, canned from imported frozen Japanese and Peruvian fish is quoting substantially under the basis of west coast canners, but the trade has been slow to accept the eastern pack thus far.

SALMON — Distributors in this area are apparently well covered for their anticipated salmon Lenten needs, and there was little activity seen in the market this week. Coast reports note a steady and unchanged market, with fancy red Alaska talls at $31.25 per case, red Alaska chinooks at $25.50, and medium reds at $23, all f.o.b. Seattle.

BOB WHITE TO PRODUCE "HE-MAN FOODS"

The Bob White Organization, Miami, Florida, has purchased for undisclosed cash sums, the He-Man Foods Corporation and Van-Bell Fine Foods, Inc., Miami canners of tropical food products. He-Man production facilities will be used for a new line of frozen food specialties, which will be introduced at the Frozen Food Convention in Chicago, according to Bob White, who will headquarter at the Conrad Hilton Hotel.

CHICAGO MARKET

Routine With Side Note Of Caution—Sustained Buying Interest In Canned Fish—Applesauce Continues Very Firm — R.S.P. Cherry Cleanup In Sight—Corn Practically Impossible To Find—Ozark Spinach Dips Slightly—Eastern Limas Show Life—Price Shading In Fruits.

By "Midwest"

Chicago, Ill., Feb. 28, 1952

THE SITUATION — Strictly routine with a side note of caution would best describe market activity in Chicago this past week and unfortunately the outlook is for more of the same for some time to come. The few shortages that have developed are no longer causing any concern as the trade have convinced themselves they will have little trouble buying anything they will need between now and new pack. Furthermore, in view of recent developments, distributors are of the opinion that prices, with only a few exceptions, are more likely to move downward if any changes do take place. Besides there is no room for speculation anyway under present OPS price regulations.

Under such circumstances there is little to highlight the week's activity unless it might be the sustained buying interest in canned fish items which lead the parade on the strong side of the market. So far very little interest is evident in the coming new packs although spring canning of spinach has been under way in the Ozarks to be followed shortly by California canners. However, it's quite apparent that if prices are to be as high or higher than present some of last year's totals will have to be reduced in order to effect orderly distribution throughout the year. Assuming there will be no major change in the international situation, the trade can be expected to watch this factor more closely than usual.

APPLESAUCE — There is no weakness here as the market continues very firm in the face of excellent movement and stocks which are expected to be short of requirements. Canners should be a happy lot as fancy New York sauce has moved up from the opening low of $1.00 for 303s to the present level of $1.25. Other sizes are up in proportion and sales are reported without resistance at these figures.

RSP CHERRIES — It appears Michigan and Wisconsin canners will have little difficulty disposing of unsold stocks of cherries before the new pack rolls around. Water packs are already at a minimum and syrup packs have been helped by the shortages of sweet cherries on the West Coast. Water pack 2s are offered at $2.25 with tens at $10.75 to $11.00. No. 2 tins of 40 degree syrup

are listed at $2.55 with tens at $12.75 while 60 degree syrup are quoted at $2.75 and $13.90.

CORN—This is a really strong one and buyers, despite their overall outlook on canned foods, are pulling all the strings trying to find corn in No. 10 tins of any grade and having no success at all. Occasional lots of 303 tins of fancy at $1.65 to $1.70 are quickly sold and just recently a few ones were offered at $1.30 and disappeared overnight. A buyer either has corn under contract with an old source of supply or he just doesn't have it. A salesman with a lot of No. 10 corn to sell could have a lot of fun right now.

SPINACH—Although spring canning has been under way only a short time Ozark canners have already let prices slip slightly and fancy spinach is now offered at $1.17½ for 303s, $1.30 for 2s, $1.70 for 2½s and $5.50 for tens. California sources are listing unsold stocks at slightly less money and some of them are already quoting for shipment out of the new pack which is expected to get under way before too long. The trade are buying sparingly as they are not too confident of the market.

LIMA BEANS — Eastern canners of fancy green limas are finding much better reception in this market than they have for some time. Lima beans were in the doldrums for quite a while but recently sales have begun to show life. The emphasis has been on tens, and in particular, fancy mediums at $10.00. However, 303s are also coming in for some attention and these are quoted generally at $2.40 for tiny, $2.15 for small, $1.75 for medium and $1.50 for green and white.

NORTHWEST FRUITS—Prune plums from this section have sold very well this year probably because by comparison to other fruits prices are low. Unsold stocks are limited with only a few 2½s offered for sale and these are held firm at $2.15 for fancy and $2.00 for choice. A complete assortment of all sizes and grades of pears are offered and these are quoted generally at $15.75 for fancy tens, $4.50 for 2½s and $2.75 for 1s. Choice are listed at $14.75, $4.10 and $2.55 with standards at $13.25, $3.65 and $2.35. Competition from California is hurting in lower grades where 2½ standards are quoted at $2.90 to $3.00. While the above prices represent quoted lists a good deal of price shading is evident.

CLING PEACHES—With the bulk of unsold stocks in the hands of nationally advertised brands the market is still holding at $3.10 for 2½ fancy, halves, $2.80 for choice and $2.60 for standards. However, in view of the shaky position of cocktail and pears and the rate of movement on peaches as compared to supplies, the trade have their fingers crossed expecting the worst. This may be only usual trade pessimism but it does have it's effect on market activity. Independent canners have little to worry about as most of them are closely sold.

CALIFORNIA MARKET

Move To Hold Growers Prices At Least To Last Year's Levels—Dry Beans Weakened Further—Steady Shipment Of Fruits—Tomato Movement Satisfactory—Readying For Asparagus — Steady Movement Applesauce, Pineapple—Fish Firmly Held.

By "Berkeley"

Berkeley, Calif., Feb. 28, 1952

THE SITUATION—A fair volume of spot business is being done at this time, but no especially large orders are being placed, with buyers apparently anticipating requirements only for the immediate future. Canners are giving thought to new pack and word is being passed on to growers to the effect that prices must be held at least to last year's levels on many items, with reductions on some. The trade is pointing out the experience had last year with olives, which were a near-record crop. Growers came out with early demands for higher prices for this fruit but ended with a reduction. Lower prices for the canned product resulted and business has been stepped up to a marked extent. It is suggested that this policy might be followed in some other lines where surpluses are accumulating.

DRY BEANS — The California dry bean market has weakened further during the past week, with larger offerings meeting with slow demand. This despite the announcement of higher support prices for the 1952 crop. Red kidney and California reds were especially weak and dropped around 25 cents per 100 pounds in price. Small whites dropped 10 cents and are now offered at $7.90 to $8.00 per 100, with canners almost entirely out of the market for the time being. The Government is calling for an increase in bean acreage this year, the suggestion being made that it is not likely that the acreage yield will be as high as in 1951. The acreage and production goals have been broken down into State goals for all beans without reference to classes, except for baby Limas in California which calls for 40,000 acres, instead of the 52,000 acres planted last year. Baby Limas are now selling as low as $6.25 per 100 pounds.

FRUITS — Steady shipping is under way on almost all items in the canned fruit list, this week marking the end of the fiscal year for some of the larger firms, with many sales contracts calling for shipment before March 1st. Cling peaches are firm at list prices that have prevailed for some time, but fancy Elberta freestone peaches are dragging somewhat. Many distributors contend that prices on this item are rather out of line with those on others in the fruit list. Irregulars are priced well below fancy and much of the business being done is on these. Large size pears are scarce but other counts are quite plentiful. Figs and plums are in good demand, with unsold stocks rather limited. Figs proved a larger pack than had been anticipated by some, but sales have been quite heavy.

TOMATOES—The movement of tomatoes is quite satisfactory and the feeling here seems to be that the market is now quite well stabilized. Tomato paste is offered at quite a wide range in price, but this is nothing unusual. Sales of fancy 6-oz. have been reported of late at $7.00, with No. 10 quoted at $14.00, but some sales of the latter have been made for less.

ASPARAGUS—Asparagus is appearing in the fresh markets in increasing quantities but this is not interfering with the demand for the canned article locally. Some distributors note that it is usually the fact that the offerings of the fresh vegetable at 50 cents to 75 cents a pound brings about a stimulated demand for canned asparagus. Some canners would like to see their stocks reduced before the new season gets into full swing but do not feel that a reduction in price is the answer. They seem to feel that any carryover might sell at a higher price later on. Some canning is expected to be under way in March.

CARROTS—Canned carrots are quite closely cleaned up in this territory and stocks of carrot juice in first hands is likewise limited. The latter is priced largely at $1.25 for 12-oz. and $1.75 for No. 2s.

APPLESAUCE — A steady movement on California canned applesauce is reported, with most sales on the basis of $1.30 for choice and $1.45 for fancy in the No. 303 size. One or two operators have shaded the general list somewhat, it is understood, but, on the other hand, one of the largest operators has been forced to prorate.

PINEAPPLE—Canned pineapple has enjoyed a steady movement of late and some canners are running very low on fancy No. 2½ sliced and on some sizes in crushed. Prices on this fruit continue unchanged and are held to be very advantageous for consumers, compared with most other fruits. Shipments of pineapple juice have been increasing steadily since the lowering of prices earlier in the year.

FISH—Most items in the fish list are now quite firmly held, with California sardines rather difficult to locate. One-pound ovals in tomato sauce are available in limited quantities at $9.25,

but difficulty is being experienced in locating 1s natural. Where the latter are to be had the price is largely $7.00-$7.25. The canned tuna market has firmed somewhat and these prices seem to be about bottom: Fancy light meat halves, $13.00; standard light meat, $12.00; chunks and flakes, $11.00, and grated, $10.00. Advertised lines are listed at the usual advance in price. The one item in canned fish that is being offered at a lower price is squid, some canners having reduced the price to $4.25, from the $4.50 price in effect most of the season.

GULF STATES MARKET

Shrimp Market Strengthened With Disposal Of Distressed Stock — Oyster Pack Moving Satisfactorily.

By "Bayou"

Mobile, Ala., Feb. 28, 1952

SHRIMP—With the distressed stock of canned Shrimp having apparently been completely disposed of, reports indicate that the market has stiffened and even an upward trend of prices is in evidence.

Canned shrimp are quoted at $3.00 per dozen for small; $3.20 for medium; $3.50 for large; and $3.90 for jumbo in 5 ounce tins, f.o.b. cannery.

New Orleans and Mobile are in the midst of Mardi Gras celebration, which will in a measure curtail the production of seafood in this area.

Landings of shrimp for the week ending February 15, 1952 were: Louisiana 4,397 barrels, including 1,481 barrels for canning; Mississippi 1,358 barrels, including 468 barrels for canning; Alabama 303 barrels, including 62 barrels for canning; Apalachicola, Florida, 72 barrels; and Texas 6,094 barrels, making a total of 12,224 barrels, which is 7,367 barrels more than were produced the previous week. The canneries received 2,011 barrels, which is 1,617 barrels more than they received the previous week.

As reported by all Market News offices last week, total holdings of frozen shrimp increased 256,000 pounds and were approximately 1,238,000 pounds less than four weeks ago. Total holdings were 590,000 pounds more than one year ago.

OYSTERS—The oyster pack is moving very satisfactory, considering the inclement weather which always interferes with production.

Landings of oysters for the week ending February 15, 1952 were: Louisiana 20.418 barrels including 16,946 barrels for canning; Mississippi 12,307 barrels, including 12,204 barrels for canning; Alabama 7,535 barrels, including 6,679 barrels for canning; and Apalachicola, Florida 506 barrels, making a total of 40,766 barrels, which is 4,685 more barrels than were produced the previous week. The canneries received 35,829 barrels which is 4,097 more barrels than were produced the previous week.

Canned oysters are quoted at $3.35 per dozen in 4⅝ tins, f.o.b. cannery.

CHICAGO BROKERS ELECT

At a recent meeting of the Chicago Food Brokers Association, the following officers were elected; John H. Mitchell, John H. Mitchell Company, President; William W. Wurm, William W. Wurm Company, Vice-President; C. B. Sturgeon, Walter W. Boulton Company, Secretary-Treasurer.

Directors elected include: Norman Goodfield, Stock & Goodfield Company; Ralph E. Lillig, Lillig Sales Company; Robert Marguerite, B. H. Salmon & Company; Harry Maas, Maas & Doyle; Al Falk, Piatt-Falk Sales Company.

Whatever your needs state them in the WANTED and FOR SALE pages of THE CANNING TRADE

QUICK RESULTS • SMALL COST

TOO LATE TO CLASSIFY

PUBLIC AUCTION—Edelbrew Breweries, 1 Bushwick Place, Brooklyn, New York. (On the premises) March 11, 1952—11 A.M. All equipment at this brewery including 74 one-piece, Glass Lined Tanks; 55 Pfaudler Glass Lined Sectional Tanks; 48 Wood Tanks; 2 Meyer-Dumore Cataract Automatic Pasteurizers; 1 Heil Automatic Cataract Pasteurizer (installed new in 1947); Copper Kettles and Cookers; Miscellaneous Pumps, Motors, 1200 ft. of Alvey Conveyor for Cases; Bottle Conveyors; Fillers; 8 Automatic Labelers; Hundreds of Fittings, Valves, Rubber Hose, Thermometers, Recorders, Gauges, etc.; tons of Copper Pipe and Tubing, Steel I Beams, Tons of Scrap, etc. Inspection anytime before sale. For detailed information write, wire, phone Auctioneers—Ralph Rosen, Genesee Bldg., Buffalo, N. Y. WAshington 2957.

Materials Handling Inst. Launches Service Plan

Recognizing as its first responsibility to American business the job of teaching operating management the economics, administration and technology of up-to-date material handling, The Material Handling Institute, Inc., has launched an Industry Service Plan which will use the press, the platform and the conference table to go into the field and work with industrial leaders "on location".

Directing the new MHI Industry Service Plan is George R. Brockway, Vice-President, The Rapids-Standard Company, Inc., Grand Rapids, Michigan, and a committee consisting of six authorities from equipment manufacturing firms in the materials handling field. The committee's resources of talent consist of specialists from the 78 manufacturing firms comprising the Institute membership.

Principal activities prompted by the MHI Industry Service Plan include: (1) closed workshop-type conferences between users and fanufacturers facing common technical problems; (2) articles and other contributions to trade, technical and business publications, designed to give management the benefit of group experience from all branches of the material handling world; (3) local conferences in industrial cities between representatives from each city's leading industries and an itinerant team of authorities on the economic, administrative and technological aspects of material handling; (4) a speaker's bureau to provide presentations on material handling before trade and business associations and technical societies; and (5) reports and surveys for wide distribution to industrial leadership groups.

RECEIVING TOMATOES BY APPOINTMENT ELIMINATES BOTH GROWER AND CANNER HEADACHES

By E. H. PRIESS

Tomatoes received by appointment are very beneficial to both the grower and the processor for the following reasons:

(a) It avoids waiting time by the grower in the delivery of his tomatoes, which makes good grower-processor relations.

(b) The grower will receive a better grade because he will deliver at the appointed time.

(c) The processor will receive tomatoes which have been picked not to exceed 24 hours.

(d) The processor will have a constant supply of tomatoes through the factory which utilizes labor and equipment most efficiently.

(e) The processor will know today the quantity he will have to process tomorrow.

(f) Processor will not need as much storage space for stacking.

(g) Fresh tomatoes delivered to the factory will eliminate some of the troubles of fruit flies, fruit fly eggs, and other insects.

SCHEDULING BY TELEPHONE

The grower shall arrange, on the day previous to that on which he desires to make a delivery and before tomatoes are picked, a definite time for the delivery of each load agreeable to himself and the processor.

Each grower is given the telephone number of the scheduling office so that he can call and make arrangements for the delivery of his load. At the time grower is making delivery, he can schedule his next load, thereby eliminating the necessity of calling on the telephone.

A ticket is given the grower on which is entered in red the grower's number, the date and hour on which the load is to be delivered, and also the number of baskets.

A scheduling sheet is made in duplicate and kept at the office. The same information is entered on the sheet as appears on the ticket. The sheet is made for both day and night delivery. The sheet serves as a guide for the scheduler so that he schedules the right number of baskets for each hour.

A traffic man uses one copy of the scheduling sheet on the day the tomatoes are delivered. As the growers arrive the traffic man lines up the loads in the order they were scheduled, and they proceed to the inspection platform.

Summary of Paper presented at Ohio Processors School, February 13, 1952.

CANNED MEAT REPORT

The quantity of meat canned and meat products processed under federal inspection during the four-week period December 30-January 26 has been reported by the Bureau of Animal Industry, USDA. However, this report represents only the supply of meat products canned during that period and available for civilian consumption. Total production, including quantities for defense agencies, was 152,812 thousand pounds.

CANNED MEAT AND MEAT PRODUCTS PROCESSED UNDER FEDERAL INSPECTION
December 30-January 26, 1952

(In thousand pounds)

	3 Lbs. & Over	Under 3 Lbs.	Total
Luncheon Meat	18,138	12,260	30,399
Canned Hams	18,428	630	19,058
Corned Beef Hash	168	4,752	4,920
Chili Con Carne	936	6,430	7,366
Vienna Sausage	141	2,431	2,572
Frankfurter & Weiners in Brine	55	915	970
Deviled Ham	.....	614	614
Other Potted & Deviled Meat Products	.....	1,864	1,864
Tamales	263	2,695	2,958
Sliced, Dried Beef	43	420	463
Liver Products	.....	131	131
Meat Stew	45	6,149	6,193
Spaghetti Meat Products	77	5,793	5,869
Tongue (except pickled)	33	399	432
Vinegar Pickled Products	1,323	1,584	2,908
Bulk Sausage	.....	739	739
Hamburger	22	928	950
Soups	1,116	37,127	38,242
Sausage in Oil	137	232	369
Tripe	1	881	882
Brains	.....	400	400
Bacon	14	266	280
All other products 20% or more meat	395	5,376	5,771
All other products less than 20% meat (except soup)	50	9,578	9,628
Total all Products	41,385	102,594	143,978

Columns do not add to total's shown in all cases since rounded figures are used. Amounts packed for defense are not included in these items. Total production, including quantities for defense agencies, was 152,812 thousand pounds.

PAISLEY OFFERS LABELING MANUAL

A new and revised 8 page profusely illustrated Technical Service Bulletin titled "Round Container Labeling" has been published by Paisley Products, Inc., of New York and Chicago. Sections in the bulletin deal with food container labeling, chemical product container labeling, government specification container labeling, and a description of labeling methods, spot labeling and wrap-around labeling. Illustrated are all the current machines used for automatic or semi-automatic operation of labeling lines, suitable for glass jars, bottles, tin cans and fiber bodied cans. A selected list of the most popular Paisley labeling adhesives for this equipment and labeling methods is also included.

The Bulletin is available on request by addressing Paisley Products, Inc., 1770 Canalport Avenue, Chicago 16, Illinois, or 630 West 51st Street, New York 19, New York or from the Paisley sales offices located in principal cities throughout the country.

CANNED FOOD PRICES

(Spot prices per dozen F.O.B. cannery unless otherwise specified.)

VEGETABLES

ASPARAGUS
Calif. All Green, Fcy., No. 2
Colossal, Mam. & Lge.....4.60
Medium 4.32
Small 4.25
Blended Spears 3.90

BEANS, STRINGLESS, GREEN
MARYLAND
Fcy., Fr., Sl., 8 oz. ..... .95
No. 303 .....1.45-1.50
No. 2 .....1.55-1.65
No. 10 .....7.50
Ex. Std., Cut, 8 oz. ..... .90
No. 303 .....1.20-1.25
No. 2 .....1.30-1.40
No. 2½ 1.75-1.90
No. 10 .....7.00
Std., Cut, No. 303.....1.15-1.20
No. 2 .....1.20-1.25
No. 10 .....5.75-6.00

WISCONSIN
Fcy. Wh. Gr., 1 sv., No. 2.....2.85
No. 10 .....14.00
2 sv., No. 2 .....2.65
3 sv, No. 2 .....2.35
Fcy. Cut, 3 sv., No. 303.....1.75
No. 2 .....1.90
No. 10 .....9.00
4 sv., No. 1 .....1.20
No. 303 .....1.60
No. 2 .....1.75
No. 10 .....8.75
Ex. Std., 5 sv., Cut,
No. 303 .....1.35-1.40
No. 10 .....7.00
Std., Cut, No. 303.....1.15-1.20
No. 2 .....1.20-1.25
No. 10 .....6.50

NORTHWEST (Blue Lakes)
Wh. Fcy., No. 2, 1 sv. 2.65-2.75
2 sv. 2.45-2.50
3 sv. 2.35-2.40
Ungraded, No. 303 .....2.25
Cut, Fcy., 3 sv., No. 303..... ..1.92½
No. 2 .....2.15
No. 10 .....11.25
Ex. Std., 4 sv., No. 303 .....1.70
No. 2 .....1.85
No. 10 .....9.50
Ex. Std., 5 sv., Cut,.....1.40-1.45
No. 2 .....1.55-1.60
No. 10 .....8.00
Std., Cut, No. 303 .....1.30
No. 2 .....1.45-1.50
No. 10 .....7.50

OZARKS
Std. Cut, Gr., No. 303.....1.17½
No. 2 .....1.25
N.Y., Gr. Fcy. Wh., No. 2,
1 sv. 2.40
2 sv. 2.35
Fcy. Cut, No. 303, 3 sv. 1.75
4 sv. 1.60-1.65
No. 10, 4 sv. 9.25
Texas, Std., Cut, No. 303.....1.25

BEANS, LIMA
Tri States, Fcy., Gr., No. 303
Tiny 2.40
Small 2.15
Medium 1.75-1.80
No. 10 .....10.00
Ex. Std., Gr. & Wh. 1.40-1.50
No. 10 .....7.00
Standard 1.25-1.30

MIDWEST
Fcy., Tiny, Gr., No. 1 .....1.70
No. 303 .....2.40
No. 10 .....12.00
Fcy., Sm. Gr., No. 1 .....1.50
No. 303 .....2.15
No. 10 .....11.00
Med. Gr., No. 1 .....1.25
No. 303 .....1.75
No. 10 .....10.00

BEETS
N.Y. Fcy., Wh., No. 2, 50/0.....2.40
35/0 .....2.10
10/0 .....1.35
Fcy., Cut, No. 2 .....1.10
No. 10 .....4.50
Fcy., Sl., No. 2 .....1.25
No. 10 .....5.25
Wis., Sliced, Fcy., 8 oz. ..... .70
No. 303 .....1.07½
No. 10 .....5.50
No. 2, Cut 1.05
Diced & Sh., No. 303..... .95
No. 2 .....1.07½
No. 10 .....4.75
No. 2, Whole, 10/0 .....1.30
20/0 .....1.75
30/0 .....2.00
60/0 .....2.60
Texas, Fcy., Cut & Diced,
No. 303 ..... .95
No. 2 .....1.07½
No. 10 .....4.75

CARROTS
N.Y., Fcy., Diced, No. 303.....1.20
No. 10 .....5.50
Midwest, Fcy., Diced, No. 1..... .75
No. 2 .....1.20
N.W. Diced, No. 303 gl. 1.17½
Texas, Std., Diced, No. 2.....1.00
No. 10 .....5.00

CORN—(*Nominally quoted*)
Md. Gold., Fcy., C.S.,
No. 303 .....1.60-1.65
Ex. Std., No. 303.....1.50-1.55
No. 10 .....Nominal
Std., No. 303.....1.35-1.40
No. 10 .....Nominal
Fcy., Gold., W.K., No 303.....1.65
No. 2 .....1.85
No. 10 .....Nominal
Ex. Std., No. 303.....1.50-1.55
Std., No. 303 .....1.40

MIDWEST
W.K. Gold., Fcy., 8 oz.....Nominal
No. 303 .....1.70
No. 10 .....Nominal
C.S. Gold., Fcy., 8 oz.....Nominal
No. 303 .....1.65
Ex. Std., No. 303.....1.50-1.55
Std., No. 303 .....Nominal

PEAS
EASTERN ALASKAS
Md., Fcy., 1 sv., No. 2.....2.50-2.70
Fcy., 2 sv., No. 2 .....2.00
No. 303 .....1.60
Ex. Std., 3 sv., 8 oz. ..... .90- .95
4 sv., No. 303 .....1.35
No. 2 .....1.45
No. 10 .....7.50
Std., 4 sv., No. 1 ..... .92½
No. 303 .....1.15-1.20
No. 2 .....1.30
No. 10 .....7.00-7.25

EASTERN SWEETS
Fcy., 2 sv., No. 303 .....2.35-2.40
4 sv., No. 303 .....1.70
5 sv., No. 303 .....1.55
No. 2 .....1.70-1.75
No. 10 .....8.50
Ex. Std., Pod run, 8 oz. ..... .80
No. 303 .....1.25-1.30
No. 2 .....1.40
No. 10 .....7.50
Std., No. 303 .....1.15-1.20
No. 10 .....7.00-7.25

NORTHWEST SWEETS
Ex. Std., Ungraded, No. 303.....1.40
5 sv., No. 303 .....1.30
6 sv. 1.25
4 sv., No. 10 .....7.85
5 sv. 7.70
Std., No. 303, 4 sv. 1.27
No. 10 .....7.35
5 sv. 1.20
No. 10 .....6.80
6 sv. 1.15

MIDWEST ALASKAS
Fcy., 1 sv., No. 303.....2.40-2.50
2 sv., No. 303.....2.00-2.10
3 sv., No. 303.....1.50-1.55
No. 10 .....9.00-9.25
Ex. Std., 3 sv., No. 303.....1.35-1.40
No. 2 .....1.55-1.60
No. 10 .....8.00
4 sv., No. 10 .....7.25
Std., 3 sv., No. 303 .....1.20
4 sv. 1.15

MIDWEST SWEETS
Fcy., 4 sv., (& ungraded),
8 oz. 95-1.00
No. 303 .....1.40-1.50
No. 10 .....8.65
5 sv., 8 oz. ..... .90- .95
No. 303 .....1.40-1.50
No. 10 .....8.15
Ex. Std., 4 sv. (& ungraded).
8 oz. ..... .85
No. 303 .....1.25-1.35
No. 10 .....7.40
5 sv., 8 oz. ..... .80
No. 303 .....1.15-1.20
No. 2 .....1.35-1.40
No. 10 .....6.90
Std., 3 sv., No. 303.....1.20
Std., 4 sv., No. 303.....1.15

SAUERKRAUT
Midwest, Fcy., No. 303..... .92½
No. 2 .....1.02½
No. 2½ 1.30
No. 10 .....4.30-4.40
N.Y., No. 2½ 1.25
No. 10 .....4.25-4.50

SPINACH
Md., Fcy., 8 oz. ..... .90
No. 2 .....1.60
No. 2½ 2.00
No. 10 .....6.75-7.25
Ozark, Fcy., No. 2.....1.30
No. 2½ 1.70
No. 10 .....5.50
Calif., Fcy., 8 oz. ..... .92½
No. 303 .....1.15
No. 2 .....1.30-1.35
No. 2½ 1.60-1.65
No. 10 .....5.25-5.30
Texas, Fcy., No. 303 .....1.12½
No. 10 .....5.50

TOMATOES
Md., Ex. Std., No. 303.....Nominal
No. 2 .....1.75-1.80
No. 2½ 2.50-2.60
No. 10 .....8.75
Std., No. 1 .....1.15
No. 303 .....1.45-1.55
No. 2 .....1.55-1.60
No. 2½ 2.25-2.35
No. 10 .....7.50-7.75
New York, Fcy., No. 2.....2.50
No. 2½ 3.10
Ex. Std., No. 2 .....1.85
No. 2½ 2.65
Indiana
Fcy., No. 1 .....—
No. 2 .....2.30-2.45
No. 2½ 3.00
Ex. Std., No. 1.....1.25
No. 2 .....1.80-1.85
No. 2½ 2.50-2.75
No. 10 .....8.50-8.75
Std., All Sizes.....Nominal
Ozarks, Std., No. 2 .....1.60
Florida, Std., No. 1.....1.00
No. 303 .....1.35
No. 2 .....1.45
No. 10 .....7.00
Calif., Fcy., S.P., No. 2.....2.25
No. 2½ 2.55-2.65
No. 10 .....8.75-9.00
Ex. Std., No. 2½ 2.40
No. 10 .....8.00-8.50
Std., No. 2 .....1.55-1.65
No. 2½ 1.75-2.00
No. 10 .....7.25

TOMATO CATSUP
Md., Fcy., No. 10.....10.00
Calif., 14 oz. glass.....1.55
No. 10 .....9.00-9.50
Ind., Fcy., 14 oz. gl. 1.45-1.65
No. 10 .....10.50

TOMATO PASTE (Per Case)
Calif., Fcy., 6 oz. 7.00
7 oz. 10.00
No. 10 .....13.75-14.00

TOMATO PUREE
Md., Fcy., No. 1, 1.045.....1.00-1.05
No. 10 .....7.00-7.50
Ind., Fcy., 1.045, No. 1.....97½-1.00
No. 10 .....6.50-7.50
Calif. Fcy., No. 2½, 1.045....2.00-2.15
1.06 .....2.35-2.45
1.07 .....2.65-2.75

FRUITS

APPLE SAUCE
Calif. Fcy., No. 303 .....1.45
No. 2 .....1.60
No. 10 .....8.50
East, Fcy., 8 oz. ..... .85
No. 303 .....1.20-1.25
No. 10 .....6.75

APRICOTS
Halves, Fcy., No. 2½.....3.50
No. 10 .....11.75-12.00
Choice, No. 2½ 3.20
No. 10 .....11.00
Std., No. 2½ 2.70-2.90
Std., No. 10 .....9.75
S.P. Pie, No. 10.....10.50-11.50

CHERRIES
R.S.P., Water, No. 2 .....2.25
No. 10 .....10.75-11.00
Calif., R.A., Fcy., No. 2½.....—

COCKTAIL
Calif., Fcy., 8 oz.....1.25
No. 2½ 3.30
No. 10 .....13.50
Choice, No. 1 .....2.10-2.20
No. 2½ 3.25-3.40
No. 10 .....12.90

PEACHES
Fcy., No. 2½ 3.10
No. 1 .....1.85-1.90
No. 10 .....10.25
Choice, No. 2½ 2.80-2.85
No. 1 .....1.70-1.75
No. 10 .....9.75-10.00
Std., No. 2½ 2.60-2.65
No. 1 .....1.65
No. 10 .....8.80-9.00
No. 10, Water 7.35
No. 10, S.P. Pie 9.15

PEARS
N.W. Fcy., Bart., No. 1.....2.60-2.75
No. 2½ 4.20-4.50
No. 10 .....15.75
No. 2½ 3.50-3.90
No. 10 .....13.00-13.50

PINEAPPLE
Hawaiian, Fcy., Sl., No. 2.....2.80
No. 2½ 3.20
No. 10 .....12.40
Crushed, No. 2 .....2.40
No. 2½ 2.85-2.90
No. 10 .....10.75
Choice, Sl., No. 2 .....2.65
No. 2½ 3.00
No. 10 .....11.80
Std., Half Slices, No. 2.....2.40
No. 2½ 2.75

JUICES

CITRUS, BLENDED
Fla., No. 2 ..... .77½- .85
46 oz. 1.67½-1.80
No. 10 .....3.62½-3.85

GRAPEFRUIT
Fla., No. 2 ..... .75- .80
46 oz. 1.60-1.75
No. 10 .....3.50-3.75
Texas, Fcy., 46 oz. 1.75-1.85

ORANGE
Fla., No. 2 ..... .80- .85
46 oz. 1.80-2.00
No. 10 .....3.75-4.00

PINEAPPLE
Hawaiian, Fcy., No. 2.....1.02½
46 oz. 2.25
No. 10 .....5.00

TOMATO
Md., Fcy., No. 2.....1.15-1.20
46 oz. 2.35-2.50
Ind., Fcy., No. 2.....1.15-1.20
46 oz. 2.30-2.50
N.Y., Fcy., No. 2 .....1.20-1.30
46 oz. 2.50-2.70
No. 10 .....5.25
Calif., Fcy., No. 2.....1.10-1.20
46 oz. 2.32½-2.60
No. 10 .....4.60-4.75

FISH

SALMON—PER CASE
Alaska, Red, No. 1 T.....31.25-32.00
½'s 17.50
Med., Red, No. 1 T.....23.00
Pink, Tall, No. 1 .....20.50-21.00
½'s 12.00-12.50
Chums, Tall, No. 1.....17.50
½'s 9.25

SARDINES—PER CASE
Maine, ¼ Oil keyless.....10.00-10.50
Cal. 1-lb. Ovals with
Tomato Sauce 9.25-9.50
No. 1, Nat. 7.00-7.25

SHRIMP—PER DOZEN
5 oz., Small 3.00
Medium 3.20
Large 3.50
Jumbo 3.90

TUNA—PER CASE
Fcy., White Meat, ½'s.....14.50-16.50
Chunks & Flakes.....12.25
Fcy., Light Meat, ½'s.....13.50-14.75
Std. 12.00
Chunks & Flakes.....11.00-13.00
Grated 10.00-11.00

PROCESSORS USE 85% OF LIMA BEAN CROP

Canners and freezers now use approximately 85 percent of Maryland's lima bean production compared with 72 percent in the 1940's.

In terms of the 1951 crop, this increase meant, according to U. S. Department of Agriculture crop reports, that 3,170 of the 3,714 tons of limas grown in the Free State are used by processors.

"An increase in sales to processors as fresh market purchases drop accounts for the growing importance of the canning and freezing markets," said Roy Fortier, agronomist for American Can Company, who explained that in contrast with former days farmers now can plant their crops with the assurance that a ready market is waiting for their product.

The state's shipment of limas to the canning and freezing market jumped 43 percent over the average of 2,210 tons a year for the 1940's while fresh market purchases have dropped 34 percent from the 832-ton average during the decade.

GETS TRAFFIC POST

Edward H. Flitton, general sales manager for the "Flavor Sealed" division of Geo. A. Hormel & Co., has been appointed transportation manager for the packing company.

SHRIMP IMPORTS FROM MEXICO

U. S. Shrimp imports from Mexico during December 1951 amounted to 5,040,948 pounds as compared to 6,529,247 pounds for the same month of 1950. The imports from Mexico for the year 1951 totaled 39,575,128 pounds, slightly less than the 39,652,640 pounds for 1950.

SHIFTS TO FROZEN FOOD

Morton Packing Company, Louisville, formerly concentrating largely on the production of canned chicken specialties, has now converted to the point where 90 percent of its operations are in quick frozen food lines, according to George T. Egger, president.

OHIO JOBBERS TO MEET

Associated Wholesale Food Distributors of Ohio will hold their annual meeting at the Neil House, Columbus, on April 22 and 23. R. B. Wiltsee, Portsmouth wholesale grocer, is president of the association.

MEETING CHAIRMAN

W. Wade Ambrose, of the Westgate-Sun Harbor Co., San Diego fish canners, has been named general chairman for the annual meeting of the National Fisheries Institute to be held in Los Angeles in April.

STERILIZATION TEMPERATURES AND THE COLOR OF TOMATO JUICE

Continental Can Company on February 21 issued research bulletin, No. 28 "The Effect of Sterilization Temperatures on Color of Tomato Juice" by T. E. Bloomer, F. W. Parrin, and G. P. Peterson of the Research Division, Continental Can Company. Complete Text was published in the Convention Issue of the Information Letter National Canners Association, February 28, 1951 and summarized in the March 5, 1951 issue of "The Canning Trade".

The paper points out that there are no color differences between samples of juice, flash sterilized at different temperatures (250° to 270°) when equivalent sterilizing values are used, irrespective of the original grade. There is no indication that conventionally processed juice is superior in color to flash sterilized juice, when the sterilizing values used for the flash process are equivalent and do not exceed the heat treatment necessary to destroy the bacillus thermoacidurans.

BUILDS NEW WAREHOUSE

Associated Grocers, Inc., Pittsburgh co-op, has started construction of a large modern warehouse in that city.

Tuc

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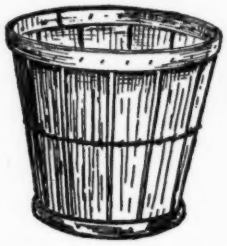

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